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Chemicals Identified in Feral and Food Animals; A Data Base

First Annual Report
October 1981

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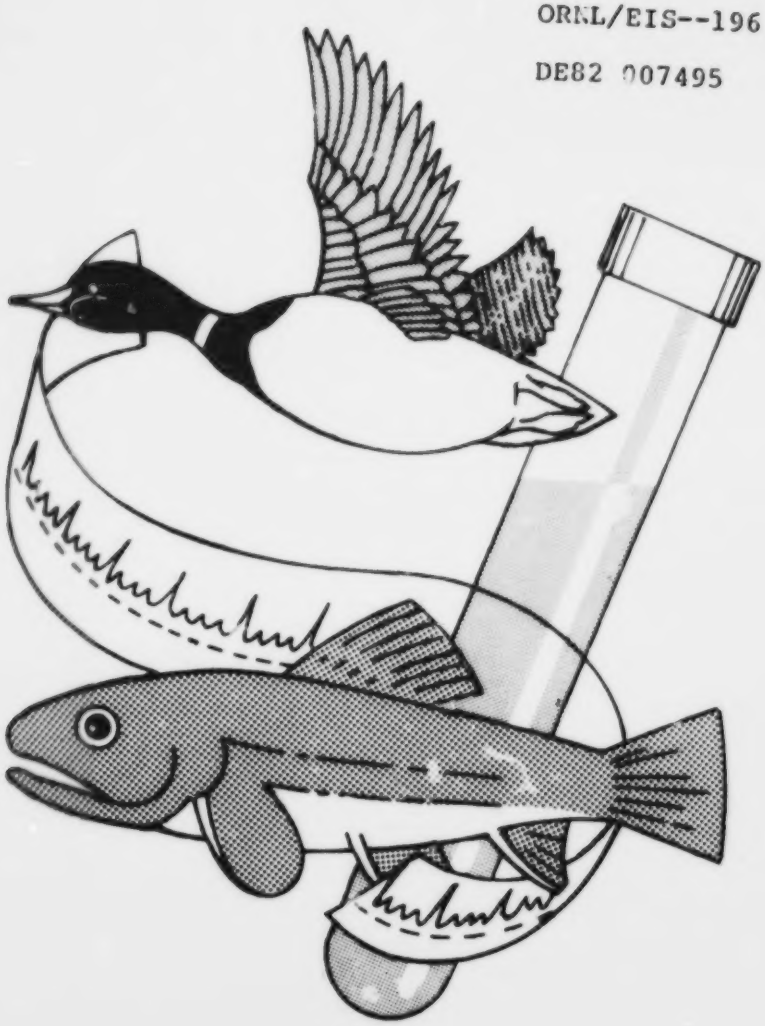

Volume I

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Vol. 1

CHEMICALS IDENTIFIED IN FERAL AND FOOD ANIMALS, A DATA BASE

First Annual Report, October 1981
Volume I
Records 1-532

Compiled by

M. Virginia Cone, Rosmarie A. Faust,
and Margaret F. Baldauf

Chemical Effects Information Center
Information Center Complex
Information Division
OAK RIDGE NATIONAL LABORATORY
Oak Ridge, Tennessee 37830
operated by
UNION CARBIDE CORPORATION
for the
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This effort was accomplished under the aegis of the Interagency Collaborative Group on Environmental Carcinogenesis, National Cancer Institute, National Institutes of Health, Chairperson, Dr. Herman F. Kraybill.

Date Published — December, 1981

Cindy Stroup, Project Officer
Design and Development Branch
Exposure Evaluation Division
Office of Toxic Substances
U.S. Environmental Protection Agency
Washington, D.C. 20460

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CONTENTS

Acknowledgments v

Introduction 1

Users' Guide 3

Abbreviations for Analytical Methods 7

References for Data Base 9

References for Physical and Chemical Data 17

Appendix A. Journals Searched 21

Appendix B. Chemicals in Data Base (by CAS Registry Numbers and Preferred Names) 25

Appendix C. Cross-Referenced Chemical Lists 31
1. CAS Preferred Names — Common Names 33
2. Common Names — CAS Preferred Names 38

Appendix D. Animals, Tissues, and Body Fluids in Data Base 63

Indices 67
Author 69
Corporate Author 71
Animal-Tissue 73
Tissue 77
Geography 79
Keyword 81

Directory of Chemicals 83
CAS Preferred Names 85
Formulas 87

Data Base 91

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For his support and valuable advice, the U.S. Environmental Protection Agency project officer expresses special thanks to Dr. Herman F. Kraybill, the National Cancer Institute coproject officer and the chairperson of the Interagency Collaborative Group on Environmental Carcinogenesis (ICGEC). In addition, thanks are due the members of the ICGEC Task Group on Chemicals in Human Tissues.

INTRODUCTION

A comprehensive data base of chemicals identified in feral and food animals has been established under the direction of the Exposure Evaluation Division in the U.S. Environmental Protection Agency's Office of Toxic Substances. This effort has grown out of the concern over continuing reports of toxic chemicals in human tissues and body fluids. Feral populations and food animals are regarded as indicators of environmental contamination and subsequent human body burden.

This data file is a companion to *Chemicals Identified in Human Biological Media, A Data Base*, and follows basically the same format. The data base on human body burden is in its third year of publication. This is the first annual report for the feral and food animal file.

Data were obtained primarily from the open literature through manual searches (retrospective to 1979) of the journals listed in Appendix A. The data base now contains information on 60 different substances. Chemicals are listed by Chemical Abstracts Service (CAS) registry numbers and preferred names in Appendix B. For the user's convenience, cross-referenced chemical lists of CAS preferred and common names are provided in Appendix C. The animals, tissues, and body fluids found to be contaminated by these chemicals are listed in Appendix D.

The data base is published annually in tabular format with indices and chemical listings that allow specific searching. A limited number of custom computer searches of the data base are available in special cases when the published format does not allow for retrieval of needed information.

It should be emphasized that the purpose of the data base is to provide a centralized resource of animal residue data and in no way is intended to obviate the need for the user to ultimately refer to the original literature or data source. It is not the intent of this program to conduct any screening or evaluation of the data.

This data base was established under the aegis of the Interagency Collaborative Group on Environmental Carcinogenesis (ICGEC), National Cancer Institute. Funding is through the National Cancer Institute-Environmental Protection Agency Collaborative Program. The work is

being done by the Oak Ridge National Laboratory's Chemical Effects Information Center, Information Center Complex, through interagency agreements involving the National Cancer Institute, the Environmental Protection Agency, and the Department of Energy. Members of the ICGEC Task Group on Chemicals in Human Tissues provide support to the program's activities. Agencies represented by members of the task group include the Armed Forces Institute of Pathology, the Centers for Disease Control, the Department of Agriculture, the Department of Energy, the Environmental Protection Agency, the Food and Drug Administration, the National Bureau of Standards, the National Cancer Institute, the National Center for Toxicological Research, the National Institute for Environmental Health Sciences, the National Institute for Occupational Safety and Health, and the National Library of Medicine.

Comments by the users of this document are invited. Questions, comments, and requests for additional information about the data base and/or searches thereof should be directed to:

Cindy Stroup, Project Officer
Design and Development Branch
Exposure Evaluation Division (TS-798)
Office of Toxic Substances
U.S. Environmental Protection Agency
401 M Street SW
Washington, D.C. 20460
Telephone (202) 426-2454

USERS' GUIDE

The data base will be published annually. The document contains introductory materials, references, appendices, indices, and a chemical directory and animal residue data extracted from the source documents. Data from 65 of the over 300 documents collected to date have been entered in the data base as of October 1981.

When appropriate articles are identified, data are extracted and entered in the data base by chemical, animal, and tissue/body fluid. Each data entry comprises a single record (or line entry) and is assigned a record number. If a particular document deals with more than one animal and/or chemical and/or tissue, there will be multiple records for that document. For example, a study of 5 chemicals in each of 3 tissues in 2 animals has 30 different records (or 30 line entries) in the data base with 30 record numbers. Record numbers are assigned consecutively throughout the entire data base and appear in the upper left corner in the first column for each record.

The data base is in tabular format and arranged alphabetically by CAS preferred chemical name. The sample record below illustrates the format. The chemical, in this case copper, is given along with its CAS registry number, formula, atomic weight, melting point, boiling point, and vapor pressure. The common name of the animal is listed alphabetically below the chemical data, followed by taxonomic names when available.

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628C, 10 mm Hg at 1870 C
Mule deer
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
154 Liver		AAS	a) 12 b) 6	a) 19-114 ppm b) 45-227 ppm	a) 61.4±34 ppm b) 97.3±59.6 ppm	a) Adults, 1.5 yr & older b) Fawns, 0.5 yr Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rico Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 J. Wildlife Diseases 18(2):175-182

Tissues are listed alphabetically in the first column with the record number. In the sample record, the tissue is liver and the record number is 154.

Information in the next five columns — exposure route, analytical method, number of cases, range, and mean — is self-explanatory and is provided when available in the source document. A list of abbreviations used for analytical method is provided on page 7. Exponential values are written as in the following example: 5×10^{-15} is 5 × 10(E-15). All means are arithmetic unless designated geometric. When included, standard error is indicated by S.E. However, values for standard deviations, when given, have no such designations. When only graphically displayed data were available, values have been estimated by the extractor and so indicated in the table under GENERAL INFORMATION.

In the GENERAL INFORMATION column, a variety of information may be included that is pertinent to the range and mean as well as experimental design, geography, health effects, pathology, morphology, and toxicity. In general, supporting information deemed important for understanding the data presented appears in this column.

The REFERENCE column includes author(s), publication date, and source. Complete literature citations are listed alphabetically by author in References for Data Base, page 9.

Because not all details of the research can be included in this publication, keywords, in uppercase, are provided for further insight into important aspects of the source documents. The use of a different chemical as a keyword indicates studies on that chemical were also reported in the same document. For example, CADMIUM may appear as a keyword in a record on mercury when the work includes data on both chemicals. In the same way, a different tissue occurring as a keyword indicates the document also deals with that tissue.

CAS preferred names are from the *Ninth Collective Index*, and, when different, names from both eighth and ninth indices (8 CI, 9 CI) are given. Appendix C provides cross-referenced alphabetical lists of commonly used synonyms paired with the CAS preferred names.

For accessing information in the data base when only the CAS registry number is known, the user should refer to Appendix B, which lists CAS

registry numbers coupled with the preferred names. For help in locating chemicals in the tabular portion of the documents, an alphabetically arranged directory of chemicals by CAS names and record numbers is provided just before the Data Base. The second part of the directory lists formulas alphabetically along with the corresponding CAS preferred names and record numbers. Indices by author, corporate author, animals and tissues, tissue or body fluid, geography, and keywords refer the user to the appropriate record number.

ABBREVIATIONS FOR ANALYTICAL METHODS

AAS	Atomic absorption spectrometry
APDC-MIBK	Ammonium pyrrolidine diethiocarbamate-methylisoburyl ketone extraction
ASV	Anodic stripping voltammetry
CC	Column chromatography
Chem	Chemical methods
Electrochem	Electrochemical methods
EM	Electron microscopy
ES	Emission spectrometry
GC	Gas chromatography
GC-EC	Gas chromatography; electron-capture detection
GC/MF	Gas chromatography coupled with mass fragmentography
GC/MS	Gas chromatography coupled with mass spectrometry
Histochem	Histochemistry
HPLC	High-pressure liquid chromatography
IR	Infrared analysis
ISE	Ion-specific electrode
MAS	Molecular absorption spectrophotometry
MED	Microwave emission detector (ion)
MS	Mass spectrometry
NA	Neutron activation
NMR	Nuclear magnetic resonance
PIXE	Proton induced X-ray emission
RIA	Radioimmunoassay
TLC	Thin-layer chromatography
UV	Ultraviolet analysis
X-ray fluores	X-ray fluorescence
X-ray spectrom	X-ray spectrometry

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10045-97-3 Cesium, isotope of mass 137

1024-57-3 4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

11096-82-5 Aroclor 1260

11097-69-1 Arochlor 1254

118-74-1 Benzene, hexachloro-

12674-11-2 Aroclor 1016

129-00-0 Pyrene

1336-36-3 Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

13981-52-7 Polonium, isotope of mass 210

13982-63-3 Radium, isotope of mass 226

14255-04-0 Lead, isotope of mass 210

14269-63-7 Thorium, isotope of mass 230

143-50-0 1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

1746-01-6 Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

22967-92-6 Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

2385-85-5 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

24880-48-8 4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

27577-90-8 Pyrene, methyl-

319-84-6 Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

330-54-1 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

39765-80-5 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-

50-29-3 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Total DDT (No postings in CHEMLINE).

50-32-8 Benzo(a)pyrene

5103-71-9 4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

5103-73-1 4,7-Methanoindan,
1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI);
4,7-Methano-1H-indene,
1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha-
(9 CI)

53-19-0 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

55-38-9 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

56-55-3 Benz(a)anthracene

57-68-1 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

58-89-9 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

60-57-1 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-,
endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth[2,3-b]oxirene,
3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

70-30-4 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

72-54-8 Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene,
1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

72-55-9 Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

7377-03-9 Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

7439-89-6 Iron

7439-92-1 Lead

7439-96-5 Manganese

7439-97-6 Mercury

7439-98-7 Molybdenum

7440-02-0 Nickel

7440-22-4 Silver

7440-38-2 Arsenic

7440-42-8 Boron

7440-43-9 Cadmium

7440-47-3 Chromium

7440-48-4 Cobalt

7440-50-8 Copper

7440-61-1 Uranium

7440-66-6 Zinc

7553-56-2	Iodine
76-44-8	4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)
7782-41-4	Fluorine
7782-49-2	Selenium
8001-35-2	Toxaphene
8001-58-9	Creosote
87-86-5	Phenol, pentachloro-
93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-

Acetic acid, (2,4,5-trichlorophenoxy)-

BCF-Bushkiller; Fortex; Forst U 46; Trioxon; Verton 2T; Verton 2-T; 2,4,5-T; (2,4,5-Trichlorophenoxy)acetic acid

Arochlor 1254

Aroclor 1254; PCB 1254

Aroclor 1016

Aroclor 1016

Aroclor 1260

Arochlor 1260; PCB 1260

Arsenic

Arsenic; Arsenic-75; Arsenic black; Grey arsenic; Metallic arsenic

Benz(a)anthracene

Benzanthracene; Benzanthrene; Benzoanthracene; Benzo(a)anthracene; Benzo(b)phenantrene; Tetraphene; 1,2-Benzanthracene; 1,2-Benz(a)anthracene; 1,2-Benzanthrene; 1,2-Benzoanthracene; 2,3-Benzophenanthrene

Benzene, hexachloro-

Amatin; Anticarie; Bunt-cure; Bunt-no-more; Co-op Hexa; HCB; Hexachlorobenzene; Julin's carbon chloride; No Bunt; No Bunt Liquid; No Bunt 40; No Bunt 80; Pentachlorophenyl chloride; Perchlorobenzene; Sanocide; Smieciotox

Benzo(a)pyrene

Benz(a)pyrene; Benzo(d,e,f)chrysene; BP (VAN); 3,4-Benz(a)pyrene; 3,4-Benzopyrene; 3,4-Benzopyrene [carcinogen]

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)

PCB; Biphenyl, chlorinated; Chlorinated diphenyl

Boron

Boron

Cadmium

Cadmium; C.I. 77180

Cesium, isotope of mass 137

Cesium-137

Chromium

Chromium

Cobalt

C.I. 77320; Cobalt; Cobalt-59

Copper

Allbri Natural Copper; Amac 110; Arwood copper; CDA 101; CDA 102; CDA 110; CDA 122; C.I. Pigment Metal 2; C.I. 77400; CuEP; CuEPP; Cu M3; Copper; Copper M 1; Copper powder; DCuP1; E-Cu57; Kafar copper; M1 [copper]; M2 [copper]; M3 [copper]; M4 [copper]; M31; M35; M 1; M 3; M 4; OFHC Cu; Raney copper; 1721 Gold

Creosote

Coal tar creosote; Creosote from coal tar; Creosote oil

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-BHC; alpha-Benzene hexachloride; alpha-HCH; alpha-Hexachloran; alpha-Hexachlorane; alpha-Hexachlorcyclohexane; alpha-Hexachlorocyclohexane; alpha-Lindane; alpha-1,2,3,4,5,6-Hexachlorcyclohexane; alpha-1,2,3,4,5,6-Hexachlorocyclohexane

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aalindan; Aficide; Agrocide; Agrocide III; Agrocide WP; Ameisentod; Ameisenmittel neu; Aparasin; Aphtiria; Aplidal; Arbitex; BBH; Ben-Hex; Bentox 10; Bexol; BHC; Celanex; Chlorexane; Codechine; DBH; Detmol-Extrakt; Devoran; Dol Granule; Drilltox-Spezial Aglukon; Entomoxan; ENT 7,796; Forst-Nexen; Gamma benzene hexachloride; gamma-Benzene hexachloride; gamma-BHC; gamma-HCH; gamma-Hexachloran; gamma-Hexachlorane; gamma-Hexachlorobenzene; gamma-Hexachlorocyclohexane; gamma-Lindane; Gammater; gamma-1,2,3,4,5,6-Hexachlorocyclohexane; Gexane; HCC; HCCH; HCH; Heclotox; Hexa; Hexachloran; Hexachlorane; Hexavern; Hexicide; Hexyclan; HGI; Hortex; Hungaria L 7; Jacutin; Kokotine; Kwell; Lendine; Lentox; Lidenal; Lindane; Lindatox; Lindex; Lindosep; Lintox; Linvur; Lorexane; Millol 49; Nezycol ; Neo-Scabicidol; Nexen FB; Nexit; Nexit-stark; Nexol-E; Nicochloran; Omnitox; Ovadziak; Ovadziak; Pedraczak; Pflanzol; Quellada; Sang-gamma; Spritz-Rapidin; Spruehpflanzol; Streunex; Tap 85; Tri-6; Viton; 1,2,3,4,5,6-Hexachlorocyclohexane; 666

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- (9 CI)

Dioxin [herbicide contaminant]; TCDBD; TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin; 2,3,7,8-Tetrachlorodibenzo-1,4-dioxin; 2,3,7,8-Tetrachlorodibenzo-p-dioxin

Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

CB 313; Chloditan; Chlodithane; Lysodren; Mitotan; Mitotane; NSC-38721; o,p'-DDD; o,p'-Dichlorodiphenyldichloroethane; o,p'-TDE; 2-(2-Chlorophenyl)-2-(4-chlorophenyl)-1,1-dichloroethane; TDE; Tetrachlorodiphenyl ethane; 1,1-Bis(p-chlorophenyl)-2,2-dichloroethane; 1,1-Bis(4-chlorophenyl)-2,2-dichloroethane; 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane; 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

DDD; Dichlorodiphenyl dichloroethane; Dilene; Me1700; p,p'-DDD; p,p'-Dichlorodiphenyldichloroethane; p,p'-Dichlorodiphenyl-2,2-dichloroethylene; p,p'-TDE; Rhothane; TDE; Tetrachlorodiphenyl ethane; 1,1-Bis(p-chlorophenyl)-2,2-dichloroethane; 1,1-Bis(4-chlorophenyl)-2,2-dichloroethane; 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane; 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane; 2,2-Bis(4-chlorophenyl)-1,1-dichloroethane; 4,4'-DDD

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Aavero-extra; Agritan; alpha,alpha-Bis(p-chlorophenyl)-beta,beta,beta-trichlorethane; Arkotine; Azotox M-33; Bosan supra; Bovidermol; Chlorophenothane; Chlorphenothan; Chlorphenotoxum; Citox; Clofenotan; Clofenotane ; DDT; Deoval; Detox; Detoxan; Dodat; Dibovin; Dichlorodiphenyltrichloroethane; Dicophane; Dykol; ENT-1506; Estonate; Ethane, 1,1,1-trichloro-2,2-bis(4-chlorophenyl); Gesafid; Gesarol; Ivoran; Nutoxan; Neocid; Neocidol; Parachlorocidum; PEE 1; Pentachlorin; Penticidum; p,p'-DDT; p,p'-Dichlorodiphenyltrichloroethane; Tafidex; Trichlorobis(4'-chlorophenyl)ethane; Zerdane; 1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethane; 1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane; 1,1,1-Trichloro-2,2-bis(4,4'-dichlorodiphenyl)ethane; 2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane; 4,4'-Dichlorodiphenyltrichloroethane

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

DDE; p,p'-DDE; p,p'-Dichlorodiphenyldichloroethylene; 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene; 1,1-Dichloro-2,2-di(p-chlorophenyl)ethylene; 2,2-Bis(4-chlorophenyl)-1,1-dichloroethylene; 4,4'-DDE

Fluorine

Fluorine; Fluorine-19

Iodine

Eranol; Iodine; Iodine-127; Iodine ((127)I2); Iodine colloidal; Iodine crystals; Iodine sublimed; Iosan Superdip; Molecular iodine

Iron

Armco iron; Ferrovac E; Iron; Loha; E05A; PZh2M; PZh2M2; PZh3; PZh1M1; PZh3M; PZh4M; PZh-2; PZh2M1; PZh-1M3; SUY B-2

Lead

C.I. Pigment Metal 4; C.I. 77575; KS-4; Lead; Lead Flake; Lead S2; S0; S1

Lead, isotope of mass 210

Lead-210; Lead of mass 210; Radium D

Manganese

Colloidal manganese; Cutaval; Manganese

Mercury

Mercury; Quicksilver

Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury; Methylmercury(1+); Methylmercury(II) cation; Methyl mercury ion; Methylmercury ion(1+)

Molybdenum

MCHVL; Molybdenum; TsM1

Nickel

C.I. 77775; Nickel; Ni 270; Ni 4303T; Ni 0901-S(Harshaw); Nickel NP2; Nickel 270; NP2; Raney alloy; Raney nickel; RCH 55/5

Octanohydroxamic acid (9 CI); Octanamide, N-hydroxy- (9 CI)

Caprylohydroxamic acid; N-Hydroxyoctanamide; Octanolhydroxamic acid; Taselin

Phenol, pentachloro-

Dowicide 7; EP 30; Fungifen; Grundier Arbezol; Lauxtol; Liroprem; PCP; Penchlorol; Penta; Pentachlorophenol; Permasan; Santophen 20

Phenol, 2,2'-methylenebis(3,4,6-trichloro-

AT 7; G 11; Acigena; Almoderm; Bilevon; Bis(2-hydroxy-3,5,6-trichlorophenyl)methane; Bis(3,5,6-trichloro-2-hydroxyphenyl)methane; B 32; Cotofilm; Distodin; Exofene; Fesia-sin; Fostril; Gamophen; Gamophene; Germa-Medica; Hexablan; Hexachlorofen; Hexachlorophen; Hexachlorophene; Hexafen; Hexophene; Hexosan; Nabac; Neosept V; pHisoHex; Hitosept; Septisol; Septofen; Steral; Steraskin; Surgi-Cen; Surofene; Teraseptic; Trichlorophene; 2,2'-Dihydroxy-3,3',5,5',6,6'-hexachlorodiphenylmethane; 2,2'-Methylenebis(3,4,6-trichlorophenol); 2,2',3,3',5,5'-Hexachloro-6,6'-dihydroxydiphenylmethane; 2,2'-Dihydroxy-3,5,6,3',5',6'-tetrachlorodiphenylmethane

Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

BAY 29493; Baycid; Bayer 9007; Baytex; ENT 25540; Entex; Fenthion; Lebaycid; Mercaptophos (VAN); MPP [pesticide]; MPP (VAN); OMS 2; Phenthion; Queletox; S 1752; Sulfidophos; Talodex; Tiguvon

Polonium, isotope of mass 210

Polonium-210; Radium F

Pyrene

Benzo(def)phenanthrene; beta-Pyrene

Pyrene, methyl-

Methylpyrene

Radium, isotope of mass 226

Radium-226

Selenium

C.I. 77805; Selenium

Silver

Argentum; C.I. 77820; L 3; Shell Silver; Silflake 135; Silver; Silver atom; Silver metal; Sr 999; V 9

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

A-502; Azolsetazin; Cremomethazine; Diazil [the sulfanilamide]; Diazil; Diazyl; Dimezathine; Kelametazine; Mefanal; Merseth; Neazina; Neazina; N(1)-(4,6-Dimethyl-2-pyrimidinyl)sulfanilamide; N(1)-(4,6-Dimethyl-2-pyrimidyl)sulfanilamide; N-(4,6-Dimethyl-2-pyrimidyl)sulfanilamide; Paramez; Pirmazin; Spambolet; Sulfadimerazine; Sulfadimesin; Sulfadimesine; Sulfadimethyldiazine; Sulfadimethylpyrimidine; Sulfadimezin; Sulfadimezine; Sulfadimidin; Sulfadimidine; Sulfadine; Sulfamethazine; Sulfamethiazine; Sulfamezathine; Sulfix; Sulfodimesin; Sulfodimezine; Sulmet; S-Mez; Sulphadimethylpyrimidine; Sulphadimidine; Sulphamethazine; Sulphamezathine; Sulphamidine; Sulphodimezine; Supersoptil; Superseptyl; Vertolan; Vertolin; 2-(p-Aminobenzenesulfonamido)-4,6-dimethylpyrimidine; 2-Sulfanilamido-4,6-dimethylpyrimidine; 4,6-Dimethyl-2-sulfanilamidopyrimidine

Thorium, isotope of mass 230

Ionium; Thorium-230; Thorium, isotope mass-230

Total DDT (No postings in CHEMLINE).

Total DDT

Toxaphene

Alltox; Anatox; Camphechlor; Camphochlor; Chlorinated camphene; Estonox; Geniphene; Hercules 3956; Kamfochlor; Melipax; M 5055; PCbK; Penphene; Phenacide; Phenatox; Polychlorocamphene; Strobane T; Synthetic 3956; Toxakil; Toxaphen; Toxyphen

Uranium

Uranium-238; Uranium I [(238)U]

Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

AF 101; DCMU; Diuron; DMU (VAN); Duran; Herbatox (VAN); HW 920; Karamex; Karmex; Karmex Diuron Herbicide; Karmex DW; Marmer; N-(3,4-Dichlorophenyl)-N',N'-dimethylurea; N'-(3,4-Dichlorophenyl)-N,N-dimethylurea; Telvar Diuron Weed Killer; 1-(3,4-Dichlorophenyl)-3,3-dimethylurea; 1,1-Dimethyl-3-(3,4-dichlorophenyl)urea; 3-(3,4-Dichlorophenyl)-1,1-dimethylurea

Zinc

Blue powder; Zinc

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

CG-1283; Dechlorane; Dechlorane Plus; Dechlorane Plus 515; Dechlorane 4070; Dechlorane 515; Dodecachlorooctahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalene; ENT 25,719; GC 1283; Hexachlorocyclopentadiene dimer; Mirex; Perchlorodihomocubane; Perchloropentacyclodecane; Perchloropentacyclo(5.2.1.0(2,6).0(3,9).0(5,8))decane; 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-, dimer

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Chlordecone; Clordecone; Compound 1189; Decachloroketone; Decachloropentacyclo(5.2.1.0(2,6).0(3,9).0(5),(8))decan-4-one; Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[cd]pentalen-2-one; ENT-16391; GC 1189; Kepone; Merex

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Aldrin Epoxide; Alvit 55; Compound 497; Dieldrin; Dieldrex; Dielsoth; Dieldrin; Dorytox; ENT-16225; HEOD; Illoxol; Insectlack; Kombi-Albertan; Moth Snub D; Octalox; Red Shield; SD 3417; Termitox

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-

trans-Nonachlor

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Octachlor epoxide; Oxychlordan; Oxychlordane

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

ENT 25,584; Epoxyheptachlor; HCE; Heptachlor epoxide; Velsicol 53-CS-17

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)

cis-Nonachlor; Nonachlor, cis

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

alpha-Chlordan; alpha-Chlordane; Chlordan, cis-; cis-Chlordan; cis-Chlordane

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachlpro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Aahepta; Agroceres; E 3314; ENT 15,152; GPKh; Hepta; Heptachlor; Heptachlorane; Rhodiachlor; Velsicol 104; 3-Chlorochlordene

(2,4,5-Trichlorophenoxy)acetic acid
Acetic acid, (2,4,5-trichlorophenoxy)-

A-502
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Aahepta
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Aalindan
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aavero-extra
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Acigena
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

AF 101
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Aficide
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Agritan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Agroceres
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Agrocide
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Agrocide III
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Agrocide WP
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aldrin Epoxide
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Allbri Natural Copper
Copper

Alltox
Toxaphene

Almaders
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

alpha-Benzene hexachloride
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-BHC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Chlordan
4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

alpha-Chlordane
4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

alpha-HCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachloran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachlorane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachlorcyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-1,2,3,4,5,6-Hexachlorcyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha,alpha-Bis(p-chlorophenyl)-beta,beta,beta-trichlorethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Alvit 55
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Amatin
Benzene, hexachloro-

Ameisenmittel merk
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Ameisentod
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Anac 110
Copper

Anator
Toxaphene

Anticarie
Benzene, hexachloro-

Aparasin
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aphtiria
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aplidal
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Arbitox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Argentus
Silver

Arkotine
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Armco iron
Iron

Arochlor 1260
Aroclor 1260

Aroclor 1016
Aroclor 1016

Aroclor 1254
Arochlor 1254

Arsenic
Arsenic

Arsenic black
   Arsenic

Arsenic-75
   Arsenic

Arwood copper
   Copper

AT 7
   Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Azolmetazin
   Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Azotox N-33
   Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

B 32
   Phenol, 2,2'-methylenebis(3,4,6-trichloro-

BAY 29493
   Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Baycid
   Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Bayer 9007
   Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Baytex
   Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

BBH
   Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

BCP-Bushkiller
   Acetic acid, (2,4,5-trichlorophenoxy)-

Ben-Hex
   Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Bentox 10
   Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Benz(a)pyrene
   Benzo(a)pyrene

Benzanthracene
   Benz(a)anthracene

Benzanthrene
   Benz(a)anthracene

Benzo(a)anthracene
   Benz(a)anthracene

Benzo(b)phenantrene
   Benz(a)anthracene

Benzo(d,e,f)chrysene
   Benzo(a)pyrene

Benzo(def)phenanthrene
   Pyrene

Benzoanthracene
   Benz(a)anthracene

beta-Pyrene
   Pyrene

Bexol
   Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

BHC
   Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Bilevon
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Biphenyl, chlorinated
Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

Bis(2-hydroxy-3,5,6-trichlorophenyl)methane
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Bis(3,5,6-trichloro-2-hydroxyphenyl)methane
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Blue powder
Zinc

Boron
Boron

Bosan supra
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Bovidermol
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

BP (VAN)
Benzo(a)pyrene

Bunt-cure
Benzene, hexachloro-

Bunt-no-more
Benzene, hexachloro-

C.I. Pigment Metal 2
Copper

C.I. Pigment Metal 4
Lead

C.I. 77180
Cadmium

C.I. 77320
Cobalt

C.I. 77400
Copper

C.I. 77575
Lead

C.I. 77775
Nickel

C.I. 77805
Selenium

C.I. 77820
Silver

Cadmium
Cadmium

Camphechlor
Toxaphene

Camphochlor
Toxaphene

Caprylohydroxamic acid
Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

CB 313
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

CDA 101
Copper

CDA 102
Copper

CDA 110
Copper

CDA 122
Copper

Celanex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Cesium-137
Cesium, isotope of mass 137

CG-1283
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Chloditan
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Chlodithane
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Chlordan, cis-
4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

Chlordecone
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Chloresene
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Chlorinated camphene
Toxaphene

Chlorinated diphenyl
Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

Chlorophenothane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Chlorphenothan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Chlorphenotoxum
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Chrosium
Chrosium

cis-Chlordan
4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

cis-Chlordane
4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

cis-Nonachlor
4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)

Citox
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Clofenotan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Clofenotane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Clordecone
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Co-op Hexa
Benzene, hexachloro-

Coal tar creosote
Creosote

Cobalt
Cobalt

Cobalt-59
Cobalt

Codecaine
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Colloidal manganese
Manganese

Compound 1189
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Compound 497
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Copper
Copper

Copper M 1
Copper

Copper powder
Copper

Cotofila
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Cremomethazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Creosote from coal tar
Creosote

Creosote oil
Creosote

Cu M3
Copper

CuEP
Copper

CuEPP
Copper

Cutaval
Manganese

DBH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

DCMU
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

DCuP1
Copper

DDD
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

DDE
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

DDI
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Decachloroketone
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[cd]pentalen-2-one
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Decachloropentacyclo(5.2.1.0(2,6).0(3,9).0(5),(8))decan-4-one
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Dechlorane
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane Plus
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane Plus 515
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane 4070
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane 515
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Deoval
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Detsol-Extrakt
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Detox
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Detoxan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Devoran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Diazil
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Diazil [the sulfanilamide]
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Diazyl
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Dibovin
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dichlorodiphenyl dichloroethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Dichlorodiphenyltrichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dicophane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dieldrex
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Dieldrin
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Dielmoth
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Dilene
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Dimezathine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Dioxin [herbicide contaminant]
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

Distodin
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Diuron
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

DMU (VAN)
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Dodat
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dodecachlorooctahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalene
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Dol Granule
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Dorytox
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Dowicide 7
Phenol, pentachloro-

Drilltox-Spezial Aglukon
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Duran
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Dykol
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

E 3314
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

E-Cu57
Copper

ENT 15,152
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

ENT 25,584
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

ENT 25,719
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

ENT 25540
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

ENT 7,796
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

ENT-1506
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

ENT-16225
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

ENT-16391
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Entex
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Entosoxan
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

EO5A
Iron

EP 30
Phenol, pentachloro-

Epoxyheptachlor
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Iranol
Iodine

Kstonate
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Kstonox
Toxaphene

Ethane, 1,1,1-trichloro-2,2-bis(4-chlorophenyl)
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Exofene
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Fenthion
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Ferrovac E
Iron

Fesia-sin
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Fluorine
Fluorine

Fluorine-19
Fluorine

Forst U 46
Acetic acid, (2,4,5-trichlorophenoxy)-

Forst-Hexen
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Fortex
Acetic acid, (2,4,5-trichlorophenoxy)-

Fostril
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Fungifen
Phenol, pentachloro-

G 11
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Gamma benzene hexachloride
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gamma-Benzene hexachloride
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gamma-BHC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gamma-HCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gamma-Hexachloran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gamma-Hexachlorane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gamma-Hexachlorobenzene
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gamma-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gamma-Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gammater
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Ganophen
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Ganophene
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

GC 1189
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

GC 1283
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Geniphene
Toxaphene

Germa-Medica
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Gesafid
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Gesarol
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Gexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HPKh
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Grey arsenic
Arsenic

Gruadier Arbezol
Phenol, pentachloro-

HCB
Benzene, hexachloro-

HCC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HCCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HCE
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

HCH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Heclotor
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HEOD
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Hepta
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Heptachlor
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Heptachlor epoxide
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Heptachlorane
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Herbatox (VAN)
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Hercules 3956
Toxaphene

Hexa
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexablan
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexachloran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexachlorane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexachlorobenzene
Benzene, hexachloro-

Hexachlorocyclopentadiene dimer
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Hexachlorofen
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexachlorophen
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexachlorophene
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexafen
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexavera
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexicide
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexophene
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexosan
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexyclan
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HGI
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Horter
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hungaria L 7
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HW 920
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Illoxol
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Insectlack
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Iodine
Iodine

Iodine ((127)I2)
   Iodine

Iodine colloidal
   Iodine

Iodine crystals
   Iodine

Iodine sublimed
   Iodine

Iodine-127
   Iodine

Ionium
   Thorium, isotope of mass 230

Iosan Superdip
   Iodine

Iron
   Iron

Ivoran
   Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Jacutin
   Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Julin's carbon chloride
   Benzene, hexachloro-

Kafar copper
   Copper

Kanfochlor
   Toxaphene

Karamex
   Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Karmex
   Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Karmex Diuron Herbicide
   Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Karmex DW
   Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Kelasetazine
   Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Kepone
   1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Kokotine
   Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Kombi-Albertan
   1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

KS-4
   Lead

Kwell
   Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

L 3
   Silver

Lauxtol
   Phenol, pentachloro-

Lead
   Lead

Lead Flake
   Lead

Lead of mass 210
   Lead, isotope of mass 210

Lead S2
Lead

Lead-210
Lead, isotope of mass 210

Lebaycid
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Lendine
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lentox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lidenal
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindatox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindosep
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lintox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Linvur
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Liroprem
Phenol, pentachloro-

Loha
Iron

Lorexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (9 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lysodren
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

M 1
Copper

M 3
Copper

M 4
Copper

M 5055
Toxaphene

Manganese
Manganese

Marmer
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimetayl- (9 CI)

MChVL
Molybdenum

Mefanal
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Melipax
Toxaphene

Mercaptophos (VAN)
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Mercury
Mercury

Merex
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Mermeth
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Metallic arsenic
Arsenic

Methyl mercury ion
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury ion(1+)
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury(II) cation
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury(1+)
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylpyrene
Pyrene, methyl-

Me1700
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Millol 49
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Mirex
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Mitotan
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Mitotane
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Molecular iodine
Iodine

Molybdenum
Molybdenum

Moth Snub D
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

MPP (VAN)
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

MPP [pesticide]
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Mszycol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Mutoxan
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

N1 [copper]
Copper

N2 [copper]
Copper

N3 [copper]
Copper

N35
Copper

N31
Copper

N4 [copper]
Copper

N(1)-(4,6-Dimethyl-2-pyrimidinyl)sulfanilamide
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

N(1)-(4,6-Dimethyl-2-pyrimidyl)sulfanilamide
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

N-(3,4-Dichlorophenyl)-N',N'-dimethylurea
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

N-(4,6-Dimethyl-2-pyrimidyl)sulfanilamide
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

N-Hydroxyoctanamide
Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

N'-(3,4-Dichlorophenyl)-N,N-dimethylurea
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Nabac
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Neasina
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Neazina
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Neo-Scabicidol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Neocid
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Neocidol
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Neosept T
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Nexen FB
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nexit
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nexit-stark
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nexol-E
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Ni 0901-S(Harshaw)
Nickel

Ni 270
Nickel

Ni 4303T
Nickel

Nickel
Nickel

Nickel NP2
Nickel

Nickel 270
Nickel

Nicochloran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

No Bunt
Benzene, hexachloro-

No Bunt Liquid
Benzene, hexachloro-

No Bunt 40
Benzene, hexachloro-

No Bunt 80
Benzene, hexachloro-

Nonachlor, cis
4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)

NP2
Nickel

NSC-38721
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

o,p'-DDD
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

o,p'-Dichlorodiphenyldichloroethane
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

o,p'-TDE
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Octachlor epoxide
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Octalox
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Octanolhydroxamic acid
Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

OFHC Cu
Copper

Omnitox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

ONS 2
Phosphorothioic acid, O,O-diethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-diethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Ovadziak
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Owadziak
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Oxychlordan
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Oxychlordane
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

p,p'-DDD
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

p,p'-DDE
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

p,p'-DDT
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyl-2,2-dichloroethylene
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyldichloroethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyldichloroethylene
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyltrichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

p,p'-TDE
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Parachlorocidum
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Paramex
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

PCB
Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro deriva (9 CI)

PCB 1254
Arochlor 1254

PCB 1260
Aroclor 1260

PChK
Toxaphene

PCP
Phenol, pentachloro-

PEB1
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Pedraczak
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Penchlorol
Phenol, pentachloro-

Penphene
Toxaphene

Penta
Phenol, pentachloro-

Pentachloris
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Pentachlorophenol
Phenol, pentachloro-

Pentachlorophenyl chloride
Benzene, hexachloro-

Penticidum
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Perchlorobenzene
Benzene, hexachloro-

Perchlorodihomocubane
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Perchloropentacyclo(5.2.1.0(2,6).0(3,9).0(5,8))decane
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Perchloropentacyclodecane
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Persasan
Phenol, pentachloro-

Pflanzol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Phenacide
Toxaphene

Phenator
Toxaphene

Phenthion
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

pHisoHex
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Pirsazin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Polonium-210
Polonium, isotope of mass 210

Polychlorocamphene
Toxaphene

PZh-1M3
Iron

PZh-2
Iron

PZh1M1
Iron

PZh2M
Iron

PZh2M1
Iron

PZh2M2
Iron

PZh3
Iron

PZh3M
Iron

PZh4M
Iron

Queletox
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Quellada
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Quicksilver
Mercury

Radium D
Lead, isotope of mass 210

Radium F
Polonium, isotope of mass 210

Radium-226
Radium, isotope of mass 226

Raney alloy
Nickel

Raney copper
Copper

Raney nickel
Nickel

RCH 55/5
Nickel

Red Shield
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Rhodiachlor
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Rhothane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Ritosept
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

S 1752
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

S-Mez
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sanq-gamma
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Sanocide
Benzene, hexachloro-

Santophen 20
Phenol, pentachloro-

SD 3417
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Selenium
Selenium

Septisol
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Septofen
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Shell Silver
Silver

Silflake 135
Silver

Silver
Silver

Silver atom
Silver

Silver metal
Silver

Sniecidotox
Benzene, hexachloro-

Spanbolet
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Spritz-Rapidin
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Spruehpflanzol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Sr 999
Silver

Steral
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Steraskin
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Streunex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Strobane T
Toxaphene

Sulfadiazerazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazesin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazesine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazethyldiazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazethylpyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazidin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadiazidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfamethazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfamethiazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfamezathine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfidophos
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Sulfix
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfodiazsin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfodiazzine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulset
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphadimethylpyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphadimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamethasine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamethazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamezathine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphodimezine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Superseptil
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Superseptyl
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Surgi-Cen
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Surofene
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

SUY B-2
Iron

Synthetic 3956
Toxaphene

S0
Lead

S1
Lead

Tafidex
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Talodex
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Tap 85
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Taselin
Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

TCDBD
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

TCDD
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

TDE
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Telvar Diuron Weed Killer
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Teraseptic
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Termitox
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Tetrachlorodiphenyl ethane
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Tetraphene
Benz(a)anthracene

Thorium-230
Thorium, isotope of mass 230

Thorium, isotope mass-230
Thorium, isotope of mass 230

Tiguvon
Phosphorothioic acid, O,O-diethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-diethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Total DDT
Total DDT (No postings in CHEMLINE).

Toxakil
Toxaphene

Toxaphen
Toxaphene

Toxyphen
Toxaphene

trans-Nonachlor
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-

Tri-6
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Trichlorobis(4'-chlorophenyl)ethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Trichlorophene
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Trioxon
Acetic acid, (2,4,5-trichlorophenoxy)-

TsM1
Molybdenum

Uranius I [(238)U]
Uranium

Uranium-238
Uranium

V 9
Silver

Velsicol 104
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Velsicol 53-CS-17
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Vertolan
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Vertolin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Verton 2-T
Acetic acid, (2,4,5-trichlorophenoxy)-

Verton 2T
Acetic acid, (2,4,5-trichlorophenoxy)-

Viton
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Zerdane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Zinc
Zinc

1-(3,4-Dichlorophenyl)-3,3-dimethylurea
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

1,1-Bis(p-chlorophenyl)-2,2-dichloroethane
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

1,1-Bis(4-chlorophenyl)-2,2-dichloroethane
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylilene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-di(p-chlorophenyl)ethylene
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

1,1-Dimethyl-3-(3,4-dichlorophenyl)urea
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

1,1,1-Trichloro-2,2-bis(4,4'-dichlorodiphenyl)ethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

1,2-Benz(a)anthracene
Benz(a)anthracene

1,2-Benzanthracene
Benz(a)anthracene

1,2-Benzanthrene
Benz(a)anthracene

1,2-Benzoanthracene
Benz(a)anthracene

1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-, dimer
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

1721 Gold
Copper

2-(p-Aminobenzenesulfonamido)-4,6-dimethylpyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

2-(2-Chlorophenyl)-2-(4-chlorophenyl)-1,1-dichloroethane
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

2-Sulfanilamido-4,6-dimethylpyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

2,2-Bis(4-chlorophenyl)-1,1-dichloroethane
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

2,2-Bis(4-chlorophenyl)-1,1-dichloroethylene
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

2,2'-Dihydroxy-3,3',5,5',6,6'-hexachlorodiphenylmethane
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

2,2'-Dihydroxy-3,5,6,3',5',6'-tetrachlorodiphenylmethane
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

2,2'-Methylenebis(3,4,6-trichlorophenol)
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

2,2',3,3',5,5'-Hexachloro-6,6'-dihydroxydiphenylmethane
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

2,3-Benzophenanthrene
Benz(a)anthracene

2,3,7,8-Tetrachlorodibenzo-p-dioxin
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

2,3,7,8-Tetrachlorodibenzo-1,4-dioxin
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

2,4,5-T
Acetic acid, (2,4,5-trichlorophenoxy)-

3-(3,4-Dichlorophenyl)-1,1-dimethylurea
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimetayl- (9 CI)

3-Chlorochlordene
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

3,4-Benz(a)pyrene
Benzo(a)pyrene

3,4-Benzopyrene
Benzo(a)pyrene

3,4-Benzopyrene [carcinogen]
Benzo(a)pyrene

4,4'-DDD
Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

4,4'-DDE
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

4,4'-Dichlorodiphenyltrichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

4,6-Dimethyl-2-sulfanilamidopyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

666
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

ANIMALS

Antelope, pronghorn
Bass, black sea
Bass, largemouth
Bat, big brown
Bat, little brown
Beaver
Bluefish
Bluegill
Booby, Peruvian
Bullhead, black
Bullhead, brown
Burbot
Butterfish
Carp
Catfish, channel
Cattle
Chicken
Chubsucker, Greek
Clam, surf
Coot, American
Cormorant, Guanay
Cormorant, red-legged
Crab
Crappie
Crappie, black
Crayfish
Croaker
Crocodile, American
Crow
Deer, mule
Deer, whitetail
Duck, mallard
Earthworm
Eider, common
Fish
Flounder, summer
Gannet, Norwegian
Grebe, western
Grouse, ruffed
Gull, great black-backed
Gull, herring
Hake, red
Hare
Lobster
Magpie
Mink
Monkey
Mouse
Mouse, deer
Mouse, field
Mouse, white-footed
Mullet
Otter
Oyster
Perch, yellow
Pike, northern
Porpoise, harbor
Pumpkin seed
Quahog
Rabbit, cottontail
Rabbit, swamp
Raccoon
Salmon, coho
Scallop, sea
Scup
Seal
Shad, American
Sharwater, sooty
Sheep
Shrew
Shrimp, freshwater
Snake
Snake, garter
Snake, water
Spot
Squirrel, gray
Swan, mute
Swine
Tern, Inca
Toad
Trout
Trout, brook
Trout, lake
Trout, rainbow
Tuna
Tuna, albacore
Tuna, skipjack
Tuna, yellowfin
Turtle, box
Turtle, slider
Vole, meadow
Vulture, king

TISSUES AND BODY FLUIDS

Abdomen
Adipose
Adrenal gland
Bile
Blood
Blood, cells
Blood, plasma
Blood, serum
Blood, whole
Body
Body, whole
Bone
Brain
Cecum
Claws
Digestive gland
Eggs
Feathers
Fetal
Gills
Gizzard
Gonads
Green gland
Gut
Hair
Heart
Hepatopancreas
Intestine
Kidney
Liver
Lung
Muscle
Nerve
Pancreas
Pituitary
Salivary gland
Skin
Spleen
Stomach
Thorax
Thyroid gland
Urine

APPENDIX D

Animals, Tissues, and Body Fluids in Data Base

INDICES

Author, page 69
Corporate Author, page 71
Animal-Tissue, page 73
Tissue, page 77
Geography, page 79
Keyword, page 81

AUTHOR INDEX

Addison, E.F. 382-396

Anderson, R.V. 67, 68, 82, 88, 126, 127, 146, 160, 232, 233, 252, 261, 461, 462, 476, 480

Andrews, J.W. 128-131

Aufderheide, A.M. 235, 239, 244

Bache, C.A. 90-96, 481-487

Baxter, J.C. 69, 70, 72, 75, 77, 78, 80, 133, 134, 136, 139, 141, 142, 144, 236, 237, 240, 245, 248, 249, 251, 292, 293, 295, 297-300, 464, 465, 467, 470, 472, 473, 475

Bigler, W.J. 119, 331

Blue, J.L. 26, 165-167, 270-272

Boyne, J.V. 159, 223

Brevik, E.M. 51, 204, 315

Brown, R. 27-32, 40-45, 408-419

Buggiani, S.S. 255-257, 308, 309, 314

Bull, L.S. 219-222

Bunzl, F. 241, 246, 277, 278, 406, 407

Bush, B. 58

Cappon, C.J. 301, 305-307, 325, 326, 344-347, 355, 356, 425-428, 430, 431

Carnahan, J. 285, 290, 304, 339

Carver, R.A. 509-514

Castelli, M.G. 177-182

Chahal, K.S. 457, 458

Chou, C.L. 104-118

Cichy, R.F. 62

Clark, D.R., Jr. 228-231, 259, 260, 262, 273, 274

Coggin, J.L. 85, 155, 258, 381, 433, 479

Colquhoun, J.F. 12-15

Cosartie, E. 444-448

Coon, W.C. 33, 50, 52, 53, 192, 197, 198, 203, 210, 211, 449, 450, 498, 516, 522, 526, 527, 531, 532

Cox, J.A. 285, 290, 304, 339

Custer, T.W. 5, 6

Darrow, D.C. 382-396

Davis, A.M. 119, 331

Davis, R.A. 159, 223

Dean, H.J. 12-15

Decker, H.A. 275, 276

Dietrick, T.J. 85, 155, 258, 381, 433, 479

DiSunzio, J. 285, 290, 304, 339

Dooley, A.L. 22, 24, 25, 73, 76, 79, 132, 137, 140, 143, 234, 242, 247, 250, 359, 361, 363, 364, 373, 375, 377, 378, 420-422, 441-443, 453-456, 463, 468, 471, 474

Downer, J.V. 219-222

Duinker, J.C. 34-36, 55-57, 169-174, 183-185, 193-195, 199-201, 212-214, 517-519

Edelstein, B.M. 162

Edwards, W.C. 22, 24, 25, 73, 76, 79, 132, 137, 140, 143, 234, 242, 247, 250, 359, 361, 363, 364, 373, 375, 377, 378, 420-422, 441-443, 453-456, 463, 468, 471, 474

Elfving, D.C. 90-96, 481-487

Evans, M.L. 147-150

Fanelli, R. 177-182

Fimreite, N. 51, 204, 315

Flanjak, J. 21, 23, 71, 74, 120-123, 135, 138, 238, 243, 281, 282, 294, 296, 360, 362, 374, 376, 423, 424, 466, 469

Fleming, W.J., III 444-448

Fox, J.D. 219-222

Frank, R. 286-289, 317-320, 322-324, 340-343, 348-354

Furr, A.K. 90-96, 481-487

Garattini, S. 177-182

Garcia, J.D. 1-4

Gerlach, M.L. 235, 239, 244

Giles, R.C. 490-496

Gochfield, M. 291, 302, 303, 327, 332

Goldstein, R.M. 67, 68, 82, 88, 126, 127, 146, 160, 232, 233, 252, 261, 461, 462, 476, 480

Greichus, Y.A. 397-400

Greig, R.A. 81, 87, 89, 145, 158, 161, 334-338, 432, 434, 435

Griffith, F.D., Jr. 509-514

Gutenmann, W.H. 90-96, 481-487

Hall, R.J. 49, 59, 60, 186, 196, 202, 215, 216, 329, 330, 497, 515, 520, 521, 523-525, 528-530

Hamar, D.W. 235, 239, 244

Hanson, J. 405

Haschek, W.M. 90-96, 481-487

Haseltine, S.D. 59, 60, 215, 216, 329, 330, 520, 523, 524

Hatch, R.C. 26, 165-167, 270-272

Hawkins, W.E. 97-103

Heath, G.E. 436-440

Heffron, C.L. 90-96, 481-487

Heinz, G.H. 5, 6, 59, 60, 215, 216, 329, 330, 520, 523, 524

Henken, R.W. 219-222

Hillebrand, M.T.J. 34-36, 55-57, 169-174, 183-185, 193-195, 199-201, 212-214, 517-519

Hoff, G.L. 119, 331

Holcomb, C.M. 505-508

Hora, M.E. 47

Howell, J. 405

Hunsinger, R.W. 490-496

Hunt, A.E. 163, 164, 224, 225, 263-269, 488, 489

Jacobson, W.C. 436-440

Jain, A.V. 26, 165-167, 270-272

Jenkins, J.H. 119, 331

Jensen, S. 54, 86, 316

Johnson, D.D. 397-400

Johnson, D.E. 69, 70, 72, 75, 77, 78, 80, 133, 134, 136, 139, 141, 142, 144, 236, 237, 240, 245, 248, 249, 251, 292, 293, 295, 297-300, 464, 465, 467, 470, 472, 473, 475

Kaiser, T.E. 49, 186, 196, 202, 497, 515, 521, 525, 528-530

Kalra, S.K. 457, 458

Kawashima, Y. 401-404

Kienholz, E.W. 69, 70, 72, 75, 77, 78, 80, 133, 134, 136, 139, 141, 142, 144, 236, 237, 240, 245, 248, 249, 251, 292, 293, 295, 297-300, 464, 465, 467, 470, 472, 473, 475

Kihlstrom, J.E. 54, 86, 316

Kim, J.S. 58

Kolbe, E. 33, 50, 52, 53, 192, 197, 198, 203, 210, 211, 449, 450, 498, 516, 522, 526, 527, 531, 532

Kozuka, H. 401-404

Kracke, W. 241, 246, 277, 278, 406, 407

Krynitsky, A.J. 59, 60, 215, 216, 329, 330, 520, 523, 524

Krzynowek, J. 334-338

Kveseth, N. 51, 204, 315

Lee, H.Y. 21, 23, 71, 74, 120-123, 135, 138, 238, 243, 281, 282, 294, 296, 360, 362, 374, 376, 423, 424, 466, 469

Libal, G.W. 397-400

Lindvall, M. 7, 8, 10, 11, 16, 17, 19, 20, 187, 188, 190, 191, 205, 206, 208, 209

Lindvall, M.L. 9, 18, 189, 207

Lisk, D.J. 90-96, 481-487

Low, J.B. 7-11, 16-20, 187-191, 205-209

AUTHOR INDEX

MacCrimmon, M. 286-289, 317-320, 322-324, 340-343, 348-354

Mahaffey, E.A. 26, 165-167, 270-272

Martelli, G.P. 177-182

Matheson, R.A. 46, 61

Mathews, T.D. 159, 223

McChesney, A.E. 235, 239, 244

McCoy, J. 285, 290, 304, 339

McDermid, A.M. 275, 276

McCuese, D.W. 168

Meister, J. 285, 290, 304, 339

Metcalfe, C.D. 168

Millaret, R.J. 175, 176, 451, 452

Minchew, C.D. 490-496

Miyahara, T. 401-404

Mount, M.E. 175, 176, 451, 452

Munshower, F.F. 65, 66, 83, 84, 124, 125, 151, 153, 226, 227, 253, 254, 279, 280, 283, 284, 357, 358, 365, 367, 371, 372, 379, 380, 459, 460, 477, 478

Murai, T. 128-131

Musial, C.J. 46, 61

Nelson, M.A. 48

Neuman, D.R. 65, 66, 83, 84, 124, 125, 151, 153, 226, 227, 253, 254, 279, 280, 283, 284, 357, 358, 365, 367, 371, 372, 379, 380, 459, 460, 477, 478

Niimi, A.J. 37-39

Noseda, A. 177-182

O'Shea, T.J. 444-448

Oderwald, R.G. 85, 155, 258, 381, 433, 479

Oehme, F.W. 175, 176, 451, 452

Ohdaira, C. 401-404

Olsson, M. 54, 86, 316

Orberg, J. 54, 86, 316

Osheim, D.L. 48

Pancirov, R.J. 27-32, 40-45, 408-419

Parker, M.S. 505-508

Parkinson, T.F. 90-96, 481-487

Parvaneh, V. 310-313, 333

Pastel, M. 58

Patty, P.C. 49, 186, 196, 202, 497, 515, 521, 525, 528-530

Pittman, K.A. 499-504

Prideaux, J.W. 275, 276

Proctor, B.G. 104-118

Reid, J.T. 90-96, 481-487

Rhodes, M.J. 1-4

Robertson, W.B., Jr. 49, 186, 196, 202, 497, 515, 521, 525, 528-530

Ross, P.F. 48

Samuelson, G. 436-440

Sarphie, T.G. 97-103

Scanlon, P.F. 85, 155, 258, 381, 433, 479

Showalter, D.H. 436-440

Simmons, D.E. 159, 223

Simonin, H.A. 12-15

Simpson, V.R. 163, 164, 224, 225, 263-269, 488, 489

Skea, J.C. 12-15

Smalley, E.B. 26, 165-167, 270-272

Smith, J.C. 301, 305-307, 325, 326, 344-347, 355, 356, 425-428, 430, 431

Smith, R.G., Jr. 128-131

Spagnoli, J.J. 12-15

Spangler, E. 69, 70, 72, 75, 77, 78, 80, 133, 134, 136, 139, 141, 142, 144, 236, 237, 240, 245, 248, 249, 251, 292, 293, 295, 297-300, 464, 465, 467, 470, 472, 473, 475

Speyer, M.R. 321, 429

Stein, W.D. 499-504

Stetler, L.H. 63, 64, 152, 154, 156, 157, 217, 218, 366, 368-370

Stoewsand, G.S. 90-96, 481-487

Suckcharoen, S. 328

Suda, P. 286-289, 317-320, 322-324, 340-343, 348-354

Szaro, R.C. 33, 50, 52, 53, 192, 197, 198, 203, 210, 211, 449, 450, 498, 516, 522, 526, 527, 531, 532

Tate, L.G. 97-103

Telford, J.N. 90-96, 481-487

Traffas, V. 175, 176, 451, 452

Uthe, J.F. 46, 61, 104-118

Vannucchi, C. 255-257, 308, 309, 314

Veith, G.D. 12-15

Vinikour, W.S. 67, 68, 82, 88, 126, 127, 146, 160, 232, 233, 252, 261, 461, 462, 476, 480

Ward, G.M. 69, 70, 72, 75, 77, 78, 80, 133, 134, 136, 139, 141, 142, 144, 236, 237, 240, 245, 248, 249, 251, 292, 293, 295, 297-300, 464, 465, 467, 470, 472, 473, 475

Weaver, C.M. 62

Whipple, D.M. 436-440

Wiseman, E.J. 46, 61

Wren, C. 286-289, 317-320, 322-324, 340-343, 348-354

Wszolek, P.C. 90-96, 481-487

Zabik, M.E. 62

CORPORATE AUTHOR INDEX

Albany Medical College, Institute of Comparative and Human Toxicology, Albany, NY 12208 499-504

Alberta Agriculture, Animal Health Division, Veterinary Laboratory, Alberta, Canada T6 H 4P2 405

Argonne National Laboratory, Environmental Impact Studies Division, Argonne, IL 60439 67, 68, 82, 88, 126, 127, 146, 160, 232, 233, 252, 261, 461, 462, 476, 480

Bedford Institute of Oceanography, Department of Fisheries and the Environment Fisheries and Marine Service, Marine Ecology Laboratory, Dartmouth, Nova Scotia B2Y 4A2, Canada 382-396

Bunsui-cho, Nishikanbara, Niigata, Japan 401-404

CAHL, Department of Agriculture, Madison, WI 53705 275, 276

Canada Centre for Inland Waters, Great Lakes Biolimnology Laboratory, 867 Lakeshore Road, Burlington, Ontario, Canada L7R 4A6 37-39

Colorado State University, Animal Science Department, Fort Collins, CO 80523 69, 70, 72, 75, 77, 78, 80, 133, 134, 136, 139, 141, 142, 144, 236, 237, 240, 245, 248, 249, 251, 292, 293, 295, 297-300, 464, 465, 467, 470, 472, 473, 475

Colorado State University, College of Veterinary Medicine and Biomedical Sciences, Department of Pathology, Diagnostic Laboratory, Fort Collins, CO 80523 235, 239, 244

Colorado State University, Department of Fishery and Wildlife Biology, Fort Collins, CO 80523 63, 64, 152, 154, 156, 157, 217, 218, 366, 368-370

Columbia University of Public Health, Division of Environmental Health, 600 West 168th Street, New York, NY 10024 291, 302, 303, 327, 332

Cornell University, New York State Colleges of Agriculture and Life Sciences and Veterinary Medicine, Ithaca, NY 14853 90-96, 481-487

Department of Fisheries and the Environment, Fisheries and Marine Service, Technology Branch, 1707 Lower Water Street, P.O. Box 550, Halifax, Nova Scotia B3J 2S7, Canada 104-118

Exxon Research and Engineering Company, Analytical and Information Division, Linden, NJ 07036 27-32, 40-45, 408-419

Fisheries and Environment Canada, Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada 46, 61

Fisheries and Environment Canada, St. John's Newfoundland, Canada 46, 61

Fisheries and Environment Canada, Technology Branch, 1707 Lower Water Street, P.O. Box 550, Halifax, Nova Scotia B3J 2S7, Canada 46, 61

Fisheries and Environmental Sciences, Fisheries and Oceans Canada, Biological Station, St. Andrews, New Brunswick E0G 2X0, Canada 168

Florida Department of Health and Rehabilitative Services, Health Program Office, 1323 Winewood Blvd., Tallahassee, FL 32301 119, 331

Food and Drug Administration, Division of Chemistry and Physics, Washington, DC 20204 509-514

Food and Drug Administration, Division of Consolidated Laboratory Services, Commonwealth of Virginia, Richmond, VA 23219 509-514

Food and Drug Administration, Division of Drugs for Swine and Minor Species, Rockville, MD 20857 436-440

Food and Drug Administration, Division of Veterinary Medical Research, Beltsville, MD 20705 436-440

Gesellschaft fur Strahlen- und Umweltforschung mgH. Munchen, Institut fur Strahlenschutz, 8042 Neuherberg, Federal Republic of Germany 241, 246, 277, 278, 406, 407

Gloucester Laboratory, Gloucester, MA 01930 334-338

Health Commission of New South Wales, Division of Analytical Laboratories, P.O. Box 162 Lidcombe, 2141 New South Wales, Australia 21, 23, 71, 74, 120-123, 135, 138, 238, 283, 281, 282, 294, 296, 360, 362, 374, 376, 423, 424, 466, 469

Institut fur Hygiene und Technologie der Lebensmittel tierischen Ursprungs der Universitat, 8000 Muncnen, Federal Republic of Germany 241, 246, 277, 278, 406, 407

Institute of Terrestrial Ecology, Monks Wood Experimental Station, Abbots Ripton, Huntingdon, Cambridgeshire PE17 2LS, United Kingdom 163, 164, 224, 225, 263-269, 488, 489

Institute of Zoophysiology, Box 560, S-751 22 Uppsala, Sweden 54, 86, 316

Istituto di Ricerche Farmacologiche "Mario Negri", Via Eritrea 62, 20157 Milan, Italy 177-182

Kansas State University, Comparative Toxicology Laboratories, Manhattan, KS 66506 175, 176, 451, 452

Kansas State University, Veterinary Diagnostic Laboratory, Manhattan, KS 66506 175, 176, 451, 452

Kerr-McGee Nuclear Corporation, Kerr-McGee Center, Oklahoma City, OK 73125 22, 24, 25, 73, 76, 79, 132, 137, 140, 143, 234, 242, 247, 250, 359, 361, 363, 364, 373, 375, 377, 378, 420-422, 441-443, 453-456, 463, 468, 471, 474

Laboratory of Public Health of the Province of Pisa, via Vittorio Veneto, 27, Pisa, Italy 255-257, 308, 309, 314

MAFF Veterinary Investigation Centre, The Elms, Sutton Bonington, Loughborough, Leicestershire LE12 5RB, United Kingdom 163, 164, 224, 225, 263-269, 488, 489

Marine Resources Research Institute, P.O. Box 12559, Charleston, SC 29412 159, 223

Metro-Denver Sewage Disposal District No. 1, Denver, CO 69, 70, 72, 75, 77, 78, 80, 133, 134, 136, 139, 141, 142, 144, 236, 237, 240, 245, 248, 249, 251, 292, 293, 295, 297-300, 464, 465, 467, 470, 472, 473, 475

Miami University, Institute of Environmental Sciences, Oxford, OH 45046 147-150

Michigan State University, Department of Food Science and Human Nutrition, East Lansing, MI 48824 62

Minnesota Pollution Control Agency, Division of Water Quality, Roseville, MN 55113 47

Mississippi State University, Department of Biological Sciences, Mississippi State, MS 39762 490-496

Mississippi University for Women, Departments of Physical Sciences and Biological Sciences, Columbus, MS 39701 505-508

Montana State University, Montana Agricultural Experiment Station, Reclamation Group, Bozeman, MT 59717 65, 66, 83, 84, 124, 125, 151, 153, 226, 227, 253, 254, 279, 280, 283, 284, 357, 358, 365, 367, 371, 372, 379, 380, 459, 460, 477, 478

National Marine Fisheries Service, Northeast Fisheries Center, Milford Laboratory, Milford, CT 06460 81, 87, 89, 145, 158, 161, 334-338, 432, 434, 435

National Park Service, South Florida Research Center, Everglades National Park, Homestead, FL 33030 49, 186, 196, 202, 497, 515, 521, 525, 528-530

CORPORATE AUTHOR INDEX

National Swedish Environment Protection Board, Special Analytical Laboratory, S-104 05 Stockholm, Sweden 54, 86, 316

National Veterinary Investigation Laboratory, Maiduguri, Nigeria 162

National Veterinary Services Laboratories, Pathobiology Laboratory, Toxicology Section, P.O. Box 844, Ames, IA 50010 48

Netherlands Institute for Sea Research, P.O. Box 59 den Burg, Texel, Netherlands 34-36, 55-57, 169-174, 183-185, 193-195, 199-201, 212-214, 517-519

New York State Agricultural Experiment Station, Department of Food Science, Ithaca, NY 14456 90-96, 481-487

New York State Department of Environmental Conservation, Bureau of Environmental Protection, Albany, NY 12233 12-15

New York State Department of Environmental Conservation, Field Toxicant Research Unit, Rome, NY 13440 12-15

New York State Department of Health, Division of Laboratories and Research, Albany, NY 12201 58

Noranda Research Centre, Process Technology Department, Pointe Claire, Quebec H9R 1G5, Canada 321, 429

Norwegian Veterinary College, Oslo 4, Norway 51, 204, 315

Oklahoma State University, Oklahoma Animal Disease Diagnostic Laboratory, Stillwater, OK 74074 22, 24, 25, 73, 76, 79, 132, 137, 140, 143, 234, 242, 247, 250, 359, 361, 363, 364, 373, 375, 377, 378, 420-422, 441-443, 453-456, 463, 468, 471, 474

Ontario Ministry of Agriculture and Food, Provincial Pesticide Residue Testing Laboratory, Guelph, Ontario N1G 2W1, Canada 286-289, 317-320, 322-324, 340-343, 348-354

South Dakota State University, Departments of Chemistry, Animal Science and Veterinary Science, Brookings, SD 57007 397-400

Southern Illinois University at Carbondale, Department of Chemistry and Biochemistry, Carbondale, IL 62901 285, 290, 304, 339

State University of New York at Albany, Department of Atmospheric Science, 1400 Washington Avenue, Albany, NY 12222 58

Swedish Museum of Natural History, S-104 05 Stockholm, Sweden 54, 86, 316

Swedish University of Agricultural Sciences, Department of Animal Physiology S-750 07 Uppsala, Sweden 54, 86, 316

Texas Tech University, Department of Range and Wildlife Management, Lubbock, TX 79409 1-4

Toyama Medical and Pharmaceutical University, Faculty of Pharmaceutical Sciences, 2630 Sugitani, Toyama, Japan 401-404

Tuskegee Institute, Division of Plant Science, Tuskegee, AL 36188 457, 458

U.S. Environmental Protection Agency, 6201 Congdon Blvd., Duluth, MN 55804 12-15

U.S. Fish and Wildlife Service, Patuxent Wildlife Research Center, Laurel, MD 20811 5, 6, 33, 49, 50, 52, 53, 59, 60, 186, 192, 196-198, 202, 203, 210, 211, 215, 216, 228-231, 259, 260, 262, 273, 274, 329, 330, 448-450, 497, 498, 515, 516, 520-532

University of Georgia, College of Agriculture, Coastal Plain Station, Savannah, GA 31406 128-131

University of Georgia, College of Veterinary Medicine, Diagnostic Assistance Laboratory, Athens, GA 30602 26, 165-167, 270-272

University of Georgia, School of Forest Resources, Athens, GA 30602 119, 331

University of Guelph, Department of Zoology, Guelph, Ontario N1G 2W1, Canada 286-289, 317-320, 322-324, 340-343, 348-354

University of Helsinki, Department of Environmental Science, SF-00710, Helsinki 71, Finland 328

University of Kentucky, Department of Animal Science, Lexington, KY 40546 219-222

University of Pisa, Institute of General Pathology and Pathologic Anatomy, Veterinary Medicine, via delle Piagge, 2, Pisa, Italy 255-257, 308, 309, 314

University of Rochester Medical Center, Environmental Health Sciences Center and Department of Pharmacology and Toxicology, Rochester, NY 14642 301, 305-307, 325, 326, 344-347, 355, 356, 425-428, 430, 431

University of South Alabama, Departments of Anatomy and Biology, Mobile, AL 97-103

University of Tehran, Department of Food Hygiene, P.O. Box 3262, Tehran, Iran 310-313, 333

University of Tromso, 9000 Tromso, Norway 51, 204, 315

Utah State University, Utah Cooperative Wildlife Research Unit, Logan, UT 84322 7-11, 16-20, 187-191, 205-209

Virginia Commission of Game and Inland Fisheries, Eagle Rock, VA 24085 85, 155, 258, 381, 433, 479

Virginia Polytechnic Institute and State University, Department of Fisheries and Wildlife Sciences and Department of Forestry, Blacksburg, VA 24061 85, 155, 258, 381, 433, 479

Virginia Polytechnic Institute and State University, Office of Occupational Health and Safety and Reactor Laboratory, Blacksburg, VA 24061 90-96, 481-487

Western Illinois University, Department of Biological Sciences, Macomb, IL 61455 67, 68, 82, 88, 126, 127, 146, 160, 232, 233, 252, 261, 461, 462, 476, 480

ANIMAL-TISSUE INDEX

Antelope, pronghorn
Kidney 65, 124, 226, 279, 357, 371, 459

Liver 66, 125, 227, 280, 358, 372, 460

Bass, black sea
Body, whole 27, 40, 408, 414

Bass, largemouth
Muscle 285, 339

Bat, big brown
Body, whole 228

Fetal 229

Bat, little brown
Body, whole 230

Fetal 231

Beaver
Intestine 286, 340

Kidney 287, 341

Liver 288, 342

Muscle 289, 343

Bluefish
Muscle 509

Bluegill
Body, whole 67, 126, 232, 461

Muscle 290

Booby, Peruvian
Feathers 291

Bullhead, black
Body, whole 68, 127, 233, 462

Bullhead, brown
Body, whole 12

Burbot
Liver 46

Butterfish
Body, whole 28, 41, 409, 415

Carp
Muscle 47

Catfish, channel
Blood, cells 128

Blood, plasma 129

Liver 130

Muscle 131

Cattle
Adipose 48, 401

Blood 132, 238, 359, 373, 402, 453, 457

Blood, serum 219, 463

Blood, whole 235

Bone 69, 133, 236, 292, 464

Brain 70, 134, 237, 293, 465

Kidney 21, 22, 71-73, 120, 122, 135-137, 238-242, 277, 281, 294, 295, 360, 361, 374, 375, 406, 420, 423, 441, 458, 466-469

Liver 23, 24, 74-76, 121, 123, 138-140, 220, 243-247, 278, 282, 296, 297, 362, 363, 376, 377, 403, 407, 421, 424, 442, 455, 469-471

Lung 77, 141, 248, 298, 472

Muscle 25, 78, 79, 142, 143, 221, 249, 250, 299, 364, 378, 408, 422, 443, 456, 473, 474

Spleen 80, 144, 251, 300, 475

Thyroid gland 222

Urine 458

Chicken
Eggs 301, 344, 425

Chubsucker, Creek
Body, whole 13

Clam, surf
Body, whole 81, 145, 432

Coot, American
Adipose 1

Gizzard 2

Liver 3

Muscle 4

Cormorant, Guanay
Feathers 302

Cormorant, red-legged
Feathers 303

Crab
Muscle 510

Crappie
Muscle 304

Crappie, black
Body, whole 82, 146, 252, 476

Crayfish
Abdomen 147

Body, whole 148

Brain 490

Claws 149

Digestive gland 491

Gills 492

Green gland 493

Intestine 494

Muscle 495

Nerve 496

Thorax 150

Croaker
Muscle 511

Crocodile, American
Eggs 49, 186, 196, 202, 497, 515, 521, 525, 528-530

Crow
Muscle 444

Deer, mule
Bone 63, 217

Kidney 83, 151, 152, 253, 283, 365, 366, 379, 477

Liver 84, 153, 154, 254, 284, 367, 368, 380, 478

Deer, whitetail
Heart 305, 385, 426

Liver 306, 386, 427

Muscle 307, 387, 428

Duck, mallard
Body 5

Body, whole 445

Eggs 6

Muscle 446

Earthworm
Body, whole 177

Eider, common
Eggs 50, 203

Fish
Kidney 255, 308

Liver 256, 309

Muscle 257, 310-314

Flounder, summer
Body, whole 29, 42, 410, 416

Gannet, Norwegian
Eggs 51, 204, 315

Grebe, western
Adipose 7, 16, 187, 205

Blood 8, 17, 188, 206

Eggs 9, 10, 18, 19, 189, 190, 207, 208

Muscle 11, 20, 191, 209

Grouse, ruffed
Feathers 85, 155, 258, 381, 433, 479

Gull, great black-backed
Eggs 33, 52, 192, 197, 210, 449, 498, 516, 526, 531, 532

Gull, herring
Eggs 53, 198, 211, 450, 522, 527

Hake, red
Body, whole 30, 43, 411, 417

Hare
Liver 178

Lobster
Hepatopancreas 168

Magpie
Gizzard 405

Mink
Adipose 54

Kidney 86

Muscle 316

Monkey
Adipose 499

Blood, plasma 500

Liver 501

Mouse
Adipose 502

ANIMAL-TISSUE INDEX

Blood, plasma 503

Liver 504

Mouse, deer
Bone 64, 218

Kidney 156, 369

Liver 157, 370

Mouse, field
Body, whole 179

Mouse, white-footed
Body, whole 259

Fetal 260

Mullet
Muscle 512

Otter
Intestine 317, 348

Kidney 318, 349

Liver 319, 350

Muscle 320, 351

Oyster
Body, whole 87, 158, 159, 223, 434

Perch, yellow
Body, whole 14, 88, 160, 261, 480

Pike, northern
Muscle 321, 429

Porpoise, harbor
Adipose 34, 55, 169, 172, 183, 193, 199, 212, 517

Kidney 35, 56, 170, 173, 184, 194, 200, 213, 518

Liver 36, 57, 171, 174, 185, 195, 201, 214, 519

Pumpkin seed
Body, whole 15

Quahog
Body, whole 89, 161, 435

Rabbit, cottontail
Muscle 447

Rabbit, swamp
Muscle 448

Raccoon
Kidney 322, 352

Liver 323, 353

Muscle 324, 354

Salmon, coho
Body, whole 37

Scallop, sea
Body, whole 31, 44, 412, 418

Scup
Body, whole 32, 45, 413, 419

Seal
Liver 325, 355, 430

Muscle 326, 356, 431

Shad, American
Muscle 58

Shearwater, sooty
Feathers 327

Sheep
Blood, plasma 162

Bone 90, 481

Brain 91, 482

Heart 92, 483

Kidney 93, 484

Liver 94, 485

Muscle 95, 486

Spleen 96, 487

Shrew, short-tailed
Body, whole 262

Shrimp, freshwater
Body, whole 328

Snake
Adipose 180

Liver 181

Snake, garter
Body, whole 59, 215, 329, 520, 523

Snake, water
Body, whole 60, 216, 330, 524

Spot
Brain 97

Gills 98

Gut 99

Heart 100

Kidney 101

Liver 102

Muscle 103, 513

Squirrel, gray
Hair 331

Muscle 119

Swan, mute
Adrenal gland 263

Blood 264

Bone 265

Brain 266

Kidney 163, 224, 267, 488

Liver 164, 225, 268, 489

Spleen 269

Swine
Adipose 436

Adrenal gland 104

Bile 105

Blood 270, 397

Blood, plasma 165, 437

Blood, serum 175, 451

Brain 106, 176, 452

Heart 107

Intestine 108

Kidney 109, 166, 271, 398, 438

Liver 26, 110, 167, 272, 399, 439

Lung 111

Muscle 112, 400, 440

Pancreas 113

Pituitary 114

Salivary gland 115

Spleen 116

Stomach 117

Thyroid gland 118

Tern, Inca
Feathers 332

Toad
Body, whole 182

Trout
Muscle 514

Trout, brook
Adipose 382

Bile 383

Blood, plasma 384

Brain 385

Cecum 386

Gills 387

Gonads 388

Heart 389

Intestine 390

Kidney 391

Liver 392

Muscle 393

Skin 394

Spleen 395

Stomach 396

Trout, lake
Adipose 61

Body, whole 38

Muscle 62

Trout, rainbow
Body, whole 39

Tuna
Muscle 333

Tuna, albacore
Muscle 334

Tuna, skipjack
Liver 335

Muscle 336

Tuna, yellowfin
Liver 337

ANIMAL-TISSUE INDEX

Muscle 338

Turtle, box
Eggs 505

Liver 506

Turtle, slider
Eggs 507

Liver 508

Vole, meadow
Body, whole 273

Fetal 274

Vulture, king
Kidney 275

Liver 276

TISSUE INDEX

Abdomen 147

Adipose 1, 7, 16, 34, 48, 54, 55, 61, 169, 172, 180, 183, 187, 193, 199, 205, 212, 382, 401, 436, 499, 502, 517

Adrenal gland 104, 263

Bile 105, 383

Blood 8, 17, 132, 188, 206, 234, 264, 270, 359, 373, 397, 402, 453, 457

Blood, cells 128

Blood, plasma 129, 162, 165, 384, 457, 500, 503

Blood, serum 175, 219, 451, 463

Blood, whole 235

Body 5

Body, whole 12-15, 27-32, 37-45, 59, 63, 67, 68, 81, 82, 87-89, 126, 127, 145, 146, 148, 158-161, 177, 179, 182, 215, 216, 223, 228, 230, 232, 233, 252, 259, 261, 262, 273, 328-330, 408-419, 432, 434, 435, 445, 461, 462, 476, 477, 520, 523, 524

Bone 63, 68, 69, 90, 133, 217, 218, 246, 265, 292, 469, 481

Brain 73, 91, 97, 106, 134, 176, 237, 266, 293, 385, 452, 465, 482, 490

Cecum 386

Claws 149

Digestive gland 491

Eggs 6, 9, 10, 18, 19, 33, 49-53, 186, 189, 190, 192, 196-198, 202-204, 207, 208, 210, 211, 301, 315, 344, 425, 449, 450, 497, 498, 505, 507, 515, 516, 521, 522, 525-532

Feathers 85, 155, 258, 291, 302, 303, 327, 332, 381, 433, 479

Fetal 229, 231, 260, 274

Gills 98, 387, 492

Gizzard 2, 405

Gonads 388

Green gland 493

Gut 99

Hair 331

Heart 92, 100, 107, 305, 345, 389, 426, 483

Hepatopancreas 168

Intestine 108, 286, 317, 340, 348, 390, 494

Kidney 21, 22, 35, 56, 65, 71-73, 83, 86, 93, 101, 109, 120, 122, 124, 135-137, 151, 152, 156, 163, 166, 170, 173, 184, 194, 200, 213, 224, 226, 238-242, 253, 255, 267, 271, 275, 277, 279, 281, 283, 287, 294, 295, 308, 318, 322, 341, 349, 352, 357, 360, 361, 365, 366, 369, 371, 374, 375, 379, 391, 398, 406, 420, 423, 438, 441, 454, 459, 466-468, 477, 484, 488, 518

Liver 3, 23, 24, 26, 36, 46, 57, 66, 74-76, 84, 94, 102, 110, 121, 123, 125, 133, 138-140, 153, 154, 157, 164, 167, 171, 174, 178, 181, 185, 195, 201, 214, 220, 225, 227, 243-247, 254, 256, 268, 272, 276, 278, 280, 282, 284, 288, 296, 297, 306, 309, 319, 323, 325, 335, 337, 342, 346, 350, 353, 355, 358, 362, 363, 367, 368, 370, 372, 376, 377, 380, 392, 399, 403, 407, 421, 424, 427, 430, 439, 442, 455, 460, 469-471, 478, 485, 489, 501, 504, 506, 508, 519

Lung 77, 111, 141, 248, 298, 472

Muscle 4, 11, 20, 25, 47, 58, 62, 78, 79, 95, 103, 112, 119, 131, 142, 143, 191, 209, 221, 249, 250, 257, 285, 289, 290, 299, 304, 307, 310-314, 316, 320, 321, 324, 326, 333, 334, 336, 338, 339, 343, 347, 351, 354, 356, 364, 378, 393, 400, 404, 422, 428, 429, 431, 440, 443, 444, 446-448, 456, 473, 474, 486, 495, 509-514

Nerve 496

Pancreas 113

Pituitary 114

Salivary gland 115

Skin 334

Spleen 89, 96, 116, 144, 251, 269, 300, 395, 475, 487

Stomach 117, 396

Thorax 150

Thyroid gland 118, 222

Urine 458

GEOGRAPHY INDEX

Alabama, Wheeler National Wildlife Refuge 444-448

Atlantic Ocean (E) 335-338

Atlantic Ocean, Baltimore Canyon 27-32, 40-45, 408-419

Australia, New South Wales 21, 23, 71, 74, 120-123, 135, 138, 238, 243, 281, 282, 294, 296, 360, 362, 374, 376, 423, 424, 466, 469

Canada, Alberta 405

Canada, Labrador, Churchill Falls 46, 61

Canada, PreCambrian Shield, Ontario Muskoka District 286-289, 317-320, 322-324, 340-343, 348-354

Canada, Quebec (N), Inuit Eskimo Community 325, 326, 355, 356, 430, 431

Canada, Quebec (NW), Lake Dufault 321, 429

Canada, Quebec (NW), Lake Duparquet 321, 429

Chesapeake Bay 509-511, 513, 514

Colorado, Rio Blanco County, Piceance Creek Basin 63, 64, 152, 154, 157, 217, 218, 366, 368-370

Florida, Everglades National Park 49, 186, 196, 202, 497, 515, 521, 525, 528-530

Florida, Jacksonville 119, 331

Georgia (N) 26, 165-167, 270-272

Germany, Eifel area 241, 246, 277, 278, 406, 407

Hawaii 335, 336

Humboldt Current, Peru 291, 302, 303, 327, 332

Illinois (S), Jackson and Union Counties, Cedar Lake Reservoir 285, 290, 304, 339

Illinois, Fox River 67, 68, 82, 88, 126, 127, 146, 160, 232, 233, 252, 261, 461, 462, 476, 480

Indian Ocean 334

Italy, Seveso 178-182

Italy, Tuscan coasts 255-257, 308, 309, 314

Kansas 48

Lake Michigan, Pilot Island 60, 216, 330, 524

Lake Michigan, Spider Island 59, 215, 329, 520, 523

Lake Ontario 37-39

Maine, Appledore Island 33, 52, 53, 192, 197, 198, 210, 211, 449, 450, 498, 516, 522, 526, 531, 532

Maine, Bangs Island 50, 203

Maryland, Prince Georges County, Laurel 228-231, 259, 260, 262, 273, 274

Michigan, Great Lakes 62

Mississippi River 47

Mississippi, Lowndes County 505-508

Montana, Northern Great Plains 65, 66, 83, 84, 124, 125, 151, 153, 226, 227, 253, 254, 279, 280, 283, 284, 357, 358, 365, 367, 371, 372, 379, 380, 459, 460, 477, 478

Netherlands, Texel 34-36, 55-57, 169-174, 183-185, 193-195, 199-201, 212-214, 517-519

New York State (N) 305-307, 345-347, 426-428

New York, Hudson River 12-15, 58

New York, Syracuse 90-96, 481-487

Nigeria, Marguba 162

Norway, Nordmjele 51, 204, 315

Ohio, Reily, Indian Creek 147-150

Pacific Ocean (N), Oregon 334

Pacific Ocean (S), Ecuador-Peru 334

Persian Gulf 310-313, 333

South Carolina, coast 159, 223

Texas, White River Lake 1-4

Thailand 328

United Kindgom, River Trent 163, 164, 224, 225, 263-269, 488, 489

Utah, Bear River Migratory Bird Refuge 7-11, 16-20, 187-191, 205-209

Virginia (SW) 85, 155, 258, 381, 433, 479

Virginia, Fisherman Island 53, 211, 450, 522, 527

Virginia, James River 509-511, 513, 514

KEYWORD INDEX

ADULTS 5, 6, 46, 61, 85, 147-150, 155, 168, 228-231, 235, 239, 244, 258-260, 262, 273, 274, 381-396, 433, 479, 490-496, 505-508

AFRICA 162

AGE 119, 331

AIR POLLUTION 228-231, 259, 260, 262, 273, 274

ALABAMA 97-103, 444-448, 457, 458

ALKYLHYDROXAMIC ACIDS 382-396

ANIMAL FEED 90-96, 481-487

ANTELOPE 65, 66, 83, 84, 124, 125, 151, 153, 226, 227, 253, 254, 279, 280, 283, 284, 357, 358, 365, 367, 371, 372, 379, 380, 459, 460, 477, 478

ATLANTIC OCEAN 27-32, 40-45, 334-338, 408-419

AUSTRALIA 21, 23, 71, 74, 120-123, 135, 138, 238, 243, 281, 282, 294, 296, 360, 362, 374, 376, 423, 424, 466, 469

AUTOMOTIVE 228-231, 259, 260, 262, 273, 274

AUTOPSIES 90-96, 104-118, 175, 176, 235, 239, 244, 275, 276, 397-400, 405, 451, 452, 481-487

BATS 228-231, 259, 260, 262, 273, 274

BEAVERS 286-289, 317-320, 322-324, 340-343, 348-354

BIOACCUMULATION 1-20, 22, 24-62, 65-70, 72, 73, 75-84, 86-119, 124-134, 136, 137, 139-151, 153, 158-161, 163-176, 183-216, 219-237, 239-242, 244-257, 259-280, 283-293, 295, 297-309, 314-332, 334-359, 361, 363-365, 367, 371-373, 375, 377-380, 382-422, 425-432, 434-456, 459-465, 467, 468, 470-478, 480-498, 505-532

BIOINDICATORS 58, 147-150

CANADA 37-39, 46, 61, 104-118, 168, 286-289, 305-307, 317-326, 340-343, 345-356, 382-396, 405, 426-431

CARP 47

CATTLE 21-25, 48, 69-80, 120-123, 132-144, 219-222, 234-251, 277, 278, 281, 282, 292-300, 359-364, 373-378, 401-404, 406, 407, 420-424, 441-443, 453-458, 463-475

CECUM 382-396

CHICKENS 301, 344, 425

CHLORINATED HYDROCARBONS 175, 176, 451, 452

CHLORINE ORGANIC COMPOUNDS 1-4, 9, 18, 33-36, 49, 50, 52, 53, 55-57, 59, 60, 169-174, 177-186, 189, 192-203, 207, 210-216, 329, 330, 397-400, 449, 450, 457, 490-532

COLORADO 63, 64, 69, 70, 72, 75, 77, 78, 80, 133, 134, 136, 139, 141, 142, 144, 152, 154, 156, 157, 217, 218, 235-237, 239, 240, 244, 245, 248, 249, 251, 292, 293, 295, 297-300, 366, 368-370, 464, 465, 467, 470, 472, 473, 475

COMPARATIVE EVALUATIONS 81, 87, 89, 145, 158, 161, 241, 246, 277, 278, 305-307, 325, 326, 345-347, 355, 356, 406, 407, 426-428, 430-432, 434, 435

CONNECTICUT 81, 87, 89, 145, 158, 161, 432, 434, 435

COOTS 1-4

CRAYFISH 147-150, 490-496

CROCODILES 49, 186, 196, 202, 497, 515, 521, 525, 528-530

DECHLORINATION 509-514

DEER 65, 66, 83, 84, 124, 125, 151, 153, 226, 227, 253, 254, 279, 280, 283, 284, 305-307, 325, 326, 345-347, 355-358, 365, 367, 371, 372, 379, 380, 426-428, 430, 431, 459, 460, 477, 478

DEER MICE 63, 64, 152, 154, 156, 157, 217, 218, 366, 368-370

DIETS 128-131

DRUGS 436-440

DUCKS 5, 6

EARTHWORMS 177-182

FECES 26, 165-167, 270-272, 457, 458

FETUS 34-36, 55-57, 169-174, 183-185, 193-195, 199-201, 212-214, 228-231, 259, 260, 262, 273, 274, 517-519

FISHES 12-15, 27-32, 37-46, 58, 61, 62, 67, 68, 82, 88, 97-103, 126-131, 146, 160, 232, 233, 252, 255-257, 261, 308-314, 321, 333-338, 382-396, 408-419, 429, 461, 462, 476, 480, 509-514

FLORIDA 49, 119, 186, 196, 202, 331, 497, 515, 521, 525, 528-530

FOOD ADDITIVES 26, 165-167, 270-272

FOOD CONTAMINATION 62

FUNGICIDES 301, 344, 425

GANNETS 51, 204, 315

GEORGIA 26, 128-131, 165-167, 270-272

GERMANY 241, 246, 277, 278, 406, 407

HARES 177-182

HEPATOPANCREAS 168

HERBICIDES 1-4, 177-182, 457, 458

ILLINOIS 67, 68, 82, 88, 126, 127, 146, 160, 232, 233, 252, 261, 285, 290, 304, 339, 461, 462, 476, 480

INDIAN OCEAN 334-338

INDUSTRIAL ACCIDENTS 177-182

INDUSTRIAL POLLUTION 382-396, 444-448

INSECTICIDES 175, 176, 451, 452

IRAN 310-313, 333

IRRADIATION 62

ITALY 177-182, 255-257, 308, 309, 314

JAPAN 401-404

JUVENILES 5, 6, 85, 90-96, 155, 235, 239, 244, 258, 381, 397-400, 433, 479, 481-487

KANSAS 48, 175, 176, 451, 452

KENTUCKY 219-222

KIDNEY DISEASES 97-103, 162

LACTATION 401-404

LAND POLLUTION 444-448

LEAD ORGANIC COMPOUNDS 235, 239, 244

LEAD POISONING 163, 164, 224, 225, 235, 239, 244, 263-269, 275, 276, 488, 489

LIVER DISEASES 162

LOBSTERS 168

MAINE 33, 50, 52, 53, 192, 197, 198, 203, 210, 211, 449, 450, 498, 516, 522, 526, 527, 531, 532

MARYLAND 5, 6, 49, 59, 60, 186, 196, 202, 215, 216, 228-231, 259, 260, 262, 273, 274, 329, 330, 436-440, 497, 515, 520, 521, 523-525, 528-530

MEASUREMENT METHODS 499-504, 509-514

MERCURY INORGANIC COMPOUNDS 301, 344, 425

MERCURY ORGANIC COMPOUNDS 285-290, 301, 304, 317-320, 322-324, 339-344, 348-354, 425

METABOLITES 457, 458

METAL POISONING 26, 97-103, 162, 165-167, 270-272

METALS 65-68, 82-84, 88, 124-127, 146-151, 153, 160, 226, 227, 232, 233, 252-254, 261, 279, 280, 283, 284, 357, 358, 365, 367, 371, 372, 379, 380, 459-462, 476-478, 480

MICHIGAN 62

MINING 241, 246, 277, 278, 406, 407

MINK 54, 86, 316

MINNESOTA 47

MISSISSIPPI 490-496, 505-508

MOLLUSKS 81, 87, 89, 145, 158, 161, 432, 434, 435

MONTANA 65, 66, 83, 84, 124, 125, 151, 153, 226, 227, 253, 254, 279, 280, 283, 284, 357, 358, 365, 367, 371, 372, 379, 380, 459, 460, 477, 478

KEYWORD INDEX

MULE DEER 63, 64, 152, 154, 156, 157, 217, 218, 366, 368-370

NERVOUS SYSTEM DISEASES 175, 176, 451, 452

NETHERLANDS 34-36, 55-57, 169-174, 183-185, 193-195, 199-201, 212-214, 517-519

NEUROMUSCULAR DISEASES 235, 239, 244, 490-496

NEW JERSEY 27-32, 40-45, 408-419

NEW YORK 12-15, 58, 90-96, 301, 305-307, 325, 326, 344-347, 355, 356, 425-428, 430, 431, 481-487, 499-504

NORWAY 51, 204, 315

OHIO 147-150

OKLAHOMA 22, 24, 25, 73, 76, 79, 132, 137, 140, 143, 234, 242, 247, 250, 359, 361, 363, 364, 373, 375, 377, 378, 420-422, 441-443, 453-456, 463, 468, 471, 474

ORGANOPHOSPHATES 405

OTTERS 286-289, 317-320, 322-324, 340-343, 348-354

OYSTERS 159, 223

PACIFIC OCEAN 334-338

PERU 291, 302, 303, 327, 332

PESTICIDE RESIDUES 5-11, 16-20, 33-36, 46, 48, 50, 52, 53, 55-57, 59-61, 169-174, 183-185, 187-195, 197-201, 203, 205-216, 329, 330, 401-405, 444-450, 490-496, 498, 505-514, 516-520, 522-524, 526, 527, 531, 532

PESTICIDES 499-504

PIGS 104-118, 175, 176, 397-400, 451, 452

POLYCHLORINATED BIPHENYLS 5-20, 33, 46-54, 58-62, 86, 186-192, 196-198, 202-211, 215, 216, 315, 316, 329, 330, 489, 450, 497, 498, 515, 516, 520-532

POLYNUCLEAR AROMATIC HYDROCARBONS 27-32, 40-45, 408-419

PORPOISE 34-36, 55-57, 169-174, 183-185, 193-195, 199-201, 212-214, 517-519

POWER PLANTS 46, 61

RABBITS 444-448

RACCOONS 286-289, 317-320, 322-324, 340-343, 348-354

RADIOISOTOPES 119, 331

RADIONUCLIDES 241, 246, 277, 278, 406, 407

REPTILES 49, 186, 196, 202, 497, 505-508, 515, 521, 525, 528-530

RODENTS 228-231, 259, 260, 262, 273, 274

SALIVARY GLAND 104-118

SHEEP 90-96, 162, 481-487

SHREWS 228-231, 259, 260, 262, 273, 274

SHRIMPS 328

SLUDGES 69, 70, 72, 75, 77, 78, 80, 90-96, 133, 134, 136, 139, 141, 142, 144, 236, 237, 240, 245, 248, 249, 251, 292, 293, 295, 297-300, 464, 465, 467, 470, 472, 473, 475, 481-487

SNAKES 59, 60, 177-182, 215, 216, 329, 330, 520, 523, 524

SOUTH CAROLINA 159, 223

SOUTH DAKOTA 397-400

SQUIRRELS 119, 331

STEERS 48

SULFONAMIDES 436-440

SWANS 163, 164, 224, 225, 263-269, 488, 489

SWEDEN 54, 86, 316

SWINE 26, 165-167, 270-272, 436-440

TEXAS 1-4

THAILAND 328

TOADS 177-182

TRACE ELEMENTS 81, 87, 89, 145, 158, 161, 432, 434, 435

TURTLES 505-508

UNITED KINGDOM 163, 164, 224, 225, 263-269, 488, 489

URBAN AREAS 119, 331

UTAH 7-11, 16-20, 187-191, 205-209

VIRGINIA 33, 50, 52, 53, 85, 155, 192, 197, 198, 203, 210, 211, 258, 381, 433, 449, 450, 479, 498, 509-514, 516, 522, 526, 527, 531, 532

VOLES 228-231, 259, 260, 262, 273, 274

WATER POLLUTION 1-4, 12-15, 27-32, 34-46, 49, 55-58, 61, 62, 67, 68, 82, 88, 97-103, 126, 127, 146, 159, 160, 169-174, 183-186, 193-196, 199-202, 212-214, 223, 232, 233, 252, 255-257, 261, 285, 290, 291, 302-304, 308-314, 321, 327, 328, 332-339, 382-396, 408-419, 429, 444-448, 461, 462, 476, 480, 497, 509-515, 517-519, 521, 525, 528-530

WISCONSIN 275, 276

DIRECTORY OF CHEMICALS

1. CAS Preferred Names, page 85
2. Formulas, page 87

DIRECTORY - CAS PREFERRED NAMES

Acetic acid, (2,4,5-trichlorophenoxy)- 1

Arochlor 1254 5

Aroclor 1016 12

Aroclor 1260 16

Arsenic 21

Benz[a]anthracene 27

Benzene, hexachloro- 33

Benzo[a]pyrene 40

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro deriva (9 CI) 46

Boron 63

Cadmium 65

Cesium, isotope of mass 137 119

Chromium 120

Cobalt 122

Copper 124

Creosote 168

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI) 169

Cyclohexane, 1,2,3,4,5,6-hexachloro-, *gamma*- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI) 175

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- (9 CI) 177

Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-[2,2-dichloro-1-(4-chlorophenyl)ethyl]- (9 CI) 183

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- (9 CI) 186

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI) 196

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI) 202

Fluorine 217

Iodine 219

Iron 223

Lead 226

Lead, isotope of mass 210 227

Manganese 279

Mercury 285

Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI) 339

Molybdenum 357

Nickel 371

Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI) 382

Phenol, pentachloro- 397

Phenol, 2,2'-methylenebis(3,4,6-trichloro- 401

Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI) 405

Polonium, isotope of mass 210 406

Pyrene 408

Pyrene, methyl- 414

Radium, isotope of mass 226 420

DIBUTOXY - CAS PREFERRED NAME:

Selenium 423

Silver 432

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI) 436

Thorium, isotope of mass 230 441

Total DDT (No postings in CHEMLINE). 444

Toxaphene 447

Uranium 453

Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI) 457

Zinc 459

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- 490

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- 509

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI) 515

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha, 4beta,7beta,7aalpha)- 521

4,7-Methanoisobenzofuran, 1,3,4,5,6,7,8,8-octachloro-1,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,6a,6,6a-hexahydro- (9 CI) 525

4,7-Methanoisobenzofuran, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) 528

4,7-Methanoindan, 1alpha,2alpha,3alpha,3aalpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha, 4beta,7aalpha- (9 CI) 529

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta, 7aalpha)- (9 CI) 530

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8, 8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI) 532

DIRECTORY - FORMULAS

Ag
Silver 432

As
Arsenic 21

B
Boron 63

C-H7-Hg
Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI) 339

Cd
Cadmium 65

Co
Cobalt 122

Cr
Chromium 120

Cs
Cesium, isotope of mass 137 119

Cu
Copper 124

C10-Cl10-O
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- 509

C10-Cl12
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- 490

C10-H15-O3-P-S2
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI) 405

C10-H4-Cl8-O
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) 525

C10-H5-Cl7
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI) 532

C10-H5-Cl7-O
4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) 528

C10-H5-Cl9
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)- 521

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI) 529

C10-H6-Cl8
4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI) 530

C12-H14-N4-O2-S
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI) 436

C12-H4-Cl4-O2
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI) 177

C12-H8-Cl6-O
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI) 515

C13-H6-Cl6-O2
Phenol, 2,2'-methylenebis(3,4,6-trichloro- 401

C14-H10-Cl4
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI) 183

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI) 186

C14-H8-Cl4
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI) 202

DIRECTORY - FORMULAS

C14-H9-Cl5
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI) 196

Total DDT (No postings in CHEMLINE). 444

C16-H10
Pyrene 408

C17-H12
Pyrene, methyl- 414

C18-H12
Benz(a)anthracene 27

C20-H12
Benzo(a)pyrene 40

C6-Cl6
Benzene, hexachloro- 33

C6-H-Cl5-O
Phenol, pentachloro- 397

C6-H6-Cl6
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI) 169

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI) 175

C8-H17-N-O2
Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI) 382

C8-H5-Cl3-O3
Acetic acid, (2,4,5-trichlorophenoxy)- 1

C9-H10-Cl2-N2-O
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI) 457

EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Arochlor 1254 5

Aroclor 1016 12

Aroclor 1260 16

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro deriva (9 CI) 46

Creosote 168

Toxaphene 449

F
Fluorine 217

Fe
Iron 223

Hg
Mercury 285

I
Iodine 219

Mn
Manganese 279

Mo
Molybdenum 357

Ni
Nickel 371

Pb
Lead 226

Lead, isotope of mass 210 277

Po
Polonium, isotope of mass 210 406

Ra
Radium, isotope of mass 226 420

Se
Selenium 423

DIRECTORY - FORMULAS

Th
Thorium, isotope of mass 230 441

U
Uranium 453

Zn
Zinc 459

DATA BASE

Acetic acid, (2,4,5-trichlorophenoxy)-
93-76-5
C8-H5-Cl3-O3
MP 255.89, MF 153 C (crystals from benzene)
Coot, American
FULCIA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
1 Adipose		GC	12	5.0-30.0 ppb	21.0 ppb	Collected 8/76 - 12/76 in reservoir receiving runoff from watershed on which 1093 ha were treated with 0.56 kg/ha, 6/76. Texas, White River Lake COOTS; GIZZARD; HERBICIDES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; TEXAS; ADIPOSE TISSUE; LIVER; MUSCLES; BIOACCUMULATION	Garcia, J.D. Rhodes, M.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:231-235
2 Gizzard		GC	5	6.0-41.0 ppb	18.0 ppb	Collected 8/76 - 12/76 in reservoir receiving runoff from watershed on which 1093 ha were treated with 0.56 kg/ha, 6/76 Significantly higher residues in 11/76 Texas, White River Lake COOTS; GIZZARD; HERBICIDES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; TEXAS; ADIPOSE TISSUE; LIVER; MUSCLES; BIOACCUMULATION	Garcia, J.D. Rhodes, M.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:231-235
3 Liver		GC	5	2.0-118.0 ppb	39.0 ppb	Collected 8/76 - 12/76 in reservoir receiving runoff from watershed on which 1093 ha were treated with 0.56 kg/ha, 6/76 Significantly higher residues in 8/76 ($P = <.05$) Texas, White River Lake COOTS; GIZZARD; HERBICIDES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; TEXAS; ADIPOSE TISSUE; LIVER; MUSCLES; BIOACCUMULATION	Garcia, J.D. Rhodes, M.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:231-235
4 Muscle		GC	14	8.0-1338 ppb	199.0 ppb	Collected 8/76 - 12/76 in reservoir receiving runoff from watershed on which 1093 ha were treated with 0.56 kg/ha, 6/76 Significantly higher residues in 10/76 and 11/76 ($P = <.05$) Texas, White River Lake COOTS; GIZZARD; HERBICIDES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; TEXAS; ADIPOSE TISSUE; LIVER; MUSCLES; BIOACCUMULATION	Garcia, J.D. Rhodes, M.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:231-235

Arochlor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Duck, mallard
ANAS PLATYRHYNCHOS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
5 Body	Ingestion	GC	a) 5 b) 10 c) 5 d) 10 e) 2 f) 3 g) 10	a) Not given b) Not given c) Not given d) Not given e) Not applicable f) Not given g) Not given	a) 0.13 + or - 0.01 ppm b) 64.2 + or - 4.0 ppm c) 0.09 + or - 0.01 ppm d) 55.3 + or - 1.9 ppm e) Not detected f) 0.06 + or - 0.01 ppm g) 29.5 + or - 1.4 ppm Wet wt	a) Controls, drakes b) Drakes, 25 ppm diet c) Controls, hens d) Hens, 25 ppm diet e) Ducklings hatched by control hens f) Ducklings hatched by control hens g) Ducklings hatched by hens, 25 ppm diet 9 mo old game-farm birds on 25 ppm or standard diet for at least 1 mo before egglaying. 3 wk old ducklings hatched from 3rd egg of each clutch, on 25 ppm or standard diet Feathers, bills, feet, wingtips and gastrointestinal tracts removed. No detrimental effects on reproductivity or nest attentiveness BIRDS; DUCKS; EGGS; JUVENILES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; DDT; MARYLAND; ADULTS	Custer, T.W. Heinz, G.H. 1980 Environmental Pollution (Series A) 21:313-318
6 Eggs	Ingestion	GC	a) 4 b) 1 c) 4	a) Not given b) Not applicable c) Not given	a) 0.19 ppm b) Not detected c) 23.3 + or - 1.0 ppm Wet wt	a) Hatched by control hens b) Hatched by control hens c) Hatched by hens on 25 ppm diet 3rd eggs from clutches hatched by 9 mo old game-farm birds fed a 25 ppm or standard diet for at least 1 mo before egglaying. No detrimental effects on reproductivity or nest attentiveness. BIRDS; DUCKS; EGGS; JUVENILES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; BODY; MARYLAND; ADULTS	Custer, T.W. Heinz, G.H. 1980 Environmental Pollution (Series A) 21:313-318

Arochlor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Grebe, western
AECHMOPHORUS OCCIDENTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
7 Adipose		GC	18	<1-84.0 ppm wet wt	16.7 ppm wet wt	Visceral fat Higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760

(NEXT PAGE)

Arochlor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Grebe, western
AECHMOPHORUS OCCIDENTALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
8 Blood		GC	16	Not detected-1.1 ppm wet wt	<1 ppm wet wt	Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
9 Eggs		GC	40	<1-3.8 ppm wet wt	<1 ppm wet wt	Average shell thickness index 1.898 + or - 0.015 sm. 2.3% decrease from pre-DDT use period Collected 1973-74. Utah, Bear River Migratory Bird Refuge No detectable effects on reproduction. EGGS; BIRDS; UTAH; CHLORINE ORGANIC COMPOUNDS; DDE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES	Lindvall, M.L. Low, J.B. 1980 Pesticides Monitoring Journal 14(3):108-111
10 Eggs		GC	40	<1-3.8 ppm wet wt	<1 ppm wet wt	Whole eggs Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
11 Muscle		GC	24	Not detected-17.6 ppm wet wt	3.5 ppm wet wt	Breast muscle Higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760

Aroclor 1016
12674-11-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bullhead, brown
ICTALURUS NEBULOSUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
12 Body, whole			a) 5 b) 5	a) Not given b) Not given	a) 3.8 ug/g b) 2.8 ug/g	a) Fish mean wt 80 g, mean length 18.8 cm, 3.8% lipid b) Fish mean wt 74 g, mean length 19.1 cm, 1.9% lipid Whole fish composite samples Fishes transferred from Oxbow Lake, New York to the Hudson River and placed in live cages for 14 days < 0.02 ug/g Arochlor before exposure to Hudson River water. New York, Hudson River BIOACCUMULATION; WATER POLLUTION; FISHES; POLYCHLORINATED BIPHENYLS; NEW YORK; BODY	Skea, J.C. Simonin, H.A. Dean, H.J. Colquhoun, J.E. Spagnoli, J.J. Veith, G.D. 1979 Bulletin of Environmental Contamination and Toxicology 22:332-336

Aroclor 1016
12674-11-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Chubsucker, Creek
ERIMYZON OBLONGUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
13 Body, whole			2	Not given	2.2 ug/g	Fishes transferred from Oxbow Lake, New York to the Hudson River and placed in live cages for 14 days Whole fish composite samples. Fish mean wt 295 g, mean length 27.4 cm, 7.0% lipid < 0.02 ug/g Arochlor before exposure to Hudson River water. New York, Hudson River BIOACCUMULATION; WATER POLLUTION; FISHES; POLYCHLORINATED BIPHENYLS; NEW YORK; BODY	Skea, J.C. Simonin, H.A. Dean, H.J. Colquhoun, J.E. Spagnoli, J.J. Veith, G.D. 1979 Bulletin of Environmental Contamination and Toxicology 22:332-336

Aroclor 1016
12674-11-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Perch, yellow
PERCA FLAVESCENS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
14 Body, whole			3	Not given	1.8 ug/g	Fishes transferred from Oxbow Lake, New York to the Hudson River and placed in live cages for 14 days Whole fish composite samples. Fish mean wt 187 g, mean length 24.9 cm, 2.8% lipid < 0.02 ug/g Arochlor before exposure to Hudson River water. New York, Hudson River BIOACCUMULATION; WATER POLLUTION; FISHES; POLYCHLORINATED BIPHENYLS; NEW YORK; BODY	Skea, J.C. Simonin, H.A. Dean, H.J. Colquhoun, J.E. Spagnoli, J.J. Veith, G.D. 1979 Bulletin of Environmental Contamination and Toxicology 22:332-336

Aroclor 1016
12674-11-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Pumpkin seed
LEPOMIS GIBBOSUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
15 Body, whole			2	Not given	2.5 ug/g	Fishes transferred from Oxbow Lake, New York to the Hudson River and placed in live cages for 14 days Whole fish composite samples. Fish mean wt 125 g, mean length 17.8 cm, 2.3% lipid < 0.02 ug/g Arochlor before exposure to Hudson River water. New York, Hudson River BIOACCUMULATION; WATER POLLUTION; FISHES; POLYCHLORINATED BIPHENYLS; NEW YORK; BODY	Skea, J.C. Simonin, H.A. Dean, H.J. Colquhoun, J.B. Spagnoli, J.J. Veith, G.D. 1979 Bulletin of Environmental Contamination and Toxicology 22:332-336

Aroclor 1260
11096-82-5
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Grebe, western
AECHMOPHORUS OCCIDENTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
16 Adipose		GC	18	<1-147.1 ppm wet wt	22.4 ppm wet wt	Visceral fat Higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
17 Blood		GC	16	Not detected-1.0 ppm wet wt	<1 ppm wet wt	Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
18 Eggs		GC	40	<1-5.4 ppm wet wt	<1 ppm wet wt	Average shell thickness index 1.898 + or - 0.015 mm. 2.3% decrease from pre-DDT use period Collected 1973-74. Utah, Bear River Migratory Bird Refuge No detectable effects on reproduction. EGGS; BIRDS; UTAH; CHLORINE ORGANIC COMPOUNDS; DDE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES	Lindvall, M.L. Low, J.B. 1980 Pesticides Monitoring Journal 14(3):108-111

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Aroclor 1260
11096-82-5
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Grebe, western
AECHMOPHORUS OCCIDENTALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
19 Eggs		GC	40	<1-5.4 ppm wet wt	<1 ppm wet wt	Whole eggs Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
20 Muscle		GC	24	Not detected-17.6 ppm wet wt	3.8 ppm wet wt	Breast muscle Higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760

Arsenic
7440-38-2
As
AtW 74.9216, BP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Cattle
BOS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
21 Kidney		AAS	198	Not detected-0.10 ppm wet wt	0.018 + or - 0.021 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
22 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) < 0.02 ppm b) 0.04 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commerical fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

(NEXT PAGE)

Arsenic
7440-38-2
As
Atw 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Cattle
ECS spp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
23 Liver		AAS	190	< 0.01-0.09 ppm wet wt	0.013 + or - 0.015 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
24 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) < 0.02 ppm b) 0.06 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
25 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) < 0.02 ppm b) 0.10 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
26 Liver	Ingestion		1	Not applicable	0.02 ppm wet wt	From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO4 as growth promotant. Estimated death losses, 400 of 2000 pigs during 10.5 mo. Georgia (N) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, melena, weakness, pallor. Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, pale muscles, watery blood, reddened bone marrow, splenic myeloid metaplasia. SWINE; GEORGIA; METAL POISONING; BIOCHEMICAL; BLOOD PLASMA; FECES; KIDNEYS; LIVER; ARSENIC; COPPER; LEAD; BIOACCUMULATION; FOOD ADDITIVES	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, A.V. Smalley, E.B. 1979 Journal of the American Veterinary Medical Association 174(6):616-619

Benz(a)anthracene
56-55-3
C18-812
MW 228.2, MP 160 C, BP 400 C
Bass, black sea
CENTROPRITUS STRICTA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
27 Body, whole		GC UV		Not given	< ppb wet wt	Dry wt/wet wt = 0.23 Composite sample of several organisms collected in oil drilling area, depth 57 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, E.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Butterfish
PAPILIOS TRIACANTHUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
28 Body, whole		GC UV		Not given	< 20 ppb wet wt	Dry wt/wet wt = 0.29 Composite sample of several organisms Collected in oil drilling area, depth 35 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Flounder, summer
PARALICHTHYS DENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
29 Body, whole		GC UV		Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.21 Composite sample of several organisms Collected in oil drilling area, depth 102 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Hake, red
ANTHYSATE CHUSS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
30 Body, whole		GC UV		Not given	0.3 ppb wet wt	Composite sample of several organisms Collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Scallop, sea
PLACOPECTEN MAGELLIANICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
31 Body, whole		GC UV		Not given	1.1 ppb wet wt	Composite sample of several organisms collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Scup
STENOTOMUS CHRYSOPS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
32 Body, whole		GC UV		Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.26 Composite sample of several organisms collected in oil drilling area, depth 66 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benzene, hexachloro-
118-74-1
C6-C16
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
33 Eggs		GC	28	0.0-2.5 ppm wet wt	0.03 + or - 0.06 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Benzene, hexachloro-
118-74-1
C6-C16
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.0 C
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
34 Adipose	Placental	GC/MS	1	Not applicable	0.1 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
35 Kidney	Placental	GC/MS	1	Not applicable	0.7 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% Value for fetus (20 cm length) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
36 Liver	Placental	GC/MS	1	Not applicable	1.3 ug/g wet wt	In extractable lipids. Liver lipid content 2% Value for fetus (20 length) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Benzene, hexachloro-
118-74-1
C6-C16
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.0 C
Salmon, coho
ONCORHYNCHUS KISUTCH

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
37 Body, whole		GC	20	16-50 ng/g	36 + or - 9 ng/g	Significant increase in HCB levels with body wt Average wt 3.56 kg, estimated ages 3-4 yr. Lake Ontario CANADA; BIOACCUMULATION; WATER POLLUTION; HEXACHLOROBENZENE; FISHES	Niimi, A.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:20-24

Benzene, hexachloro-
118-74-1
C6-C16
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.0 C
Trout, lake
SALVELINUS NAMAYCUSH

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
38 Body, whole		GC	14	40-120 ng/g	80 + or - 23 ng/g	Significant increase in HCB levels with body wt. Significant increase of % body fat with wt Average wt 4.02 kg, estimated ages 2-5 yr. Lake Ontario CANADA; BIOACCUMULATION; WATER POLLUTION; HEXACHLOROBENZENE; FISHES	Niimi, A.J. 197 Bulletin of Environmental Contamination and Toxicology 23:20-24

Benzene, hexachloro-
118-74-1
C6-C16
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.0 C
Trout, rainbow
SALMO GAIRDNERI

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
39 Body, whole		GC	15	30-125 ng/g	62 + or - 24 ng/g	Significant increase in HCB levels with body wt Average wt 2.32 kg, estimated ages 3-7 yr. Lake Ontario CANADA; BIOACCUMULATION; WATER POLLUTION; HEXACHLOROBENZENE; FISHES	Niimi, A.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:20-24

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg
Bass, black sea
CENTROPRITUS STRICTA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
40 Body, whole		GC UV		Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.23 Composite sample of several organisms Collected in oil drilling area, depth 57 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 177 C, BP 372 C at 10 mm Hg
Butterfish
PAPILIOS TRIACANTHUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
41 Body, whole		GC UV		Not given	< 5 ppb wet wt	Dry wt/wet wt = 0.29 Composite sample of several organisms Collected in oil drilling area, depth 39 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg
Flounder, summer
PARALICHTHYS DENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
42 Body, whole		GC UV		Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.21 Composite sample of several organisms Collected in oil drilling area, depth 172 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg
Hake, red
ANOPHYSATE CHUSS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
43 Body, whole		GC UV		Not given	< 11 ppb wet wt	Composite sample of several organisms Collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, BP 179 C, BP 372 C at 10 mm Hg
Scallop, sea
PLACOPECTEN MAGELLANICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
44 Body, whole		GC UV		Not given	< 1 ppb wet wt	Composite sample of several organisms collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):870-879

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, BP 179 C, BP 372 C at 10 mm Hg
Scup
STENOTOMUS CHRYSOPS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
45 Body, whole		GC UV		Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.26 Composite sample of several organisms collected in oil drilling area, depth 66 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):870-879

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Burbot
LOTA LOTA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
46 Liver		GC/MS	a) 9 b) 22	a) 1.2-35.4 ug/g b) 0.04-1.11 ug/g Wet wt	a) 17.1 ug/g b) 0.51 ug/g Wet wt	a) From Churchill Falls power plant outfall b) From 8 sites in reservoir and lake area above power plant Summer '77 Canada, Labrador, Churchill Falls POWER PLANTS; CANADA; ADULTS; ADIPOSE TISSUE; LIVER; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION	Bunial, C.J. Uthe, J.F. Wiseman, R.J. Matheson, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:256-261

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Carp
CYPRINUS CARPIO

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
47 Muscle			115	a) 0.03-3.68 mg/kg b) 0.03-6.94 mg/kg c) 0.04-12.31 mg/kg d) >0.03-1.83 mg/kg e) >0.03-3.65 mg/kg f) 0.06-10.6 mg/kg	a) 0.80 mg/kg b) 2.3 mg/kg c) 3.7 mg/kg d) 0.59 mg/kg e) 1.5 mg/kg f) 3.0 mg/kg	a) Wt 0.0-2.5 lb, with skin b) Wt 2.5-5.0 lb, with skin c) Wt >5.0 lb, with skin d) Wt 0.0-2.5 lb, without skin e) Wt 2.5-5.0 lb, without skin f) Wt >5.0 lb, without skin Composite fillet samples of each size class. Mississippi River CARP; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; MUSCLES; MINNESOTA	Hora, M.E. 1981 Bulletin of Environmental Contamination and Toxicology 26:364-366

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
48 Adipose	Dermal	GC	113	70-2200 ppm	470 ppm	Tailhead fat biopsies of feedlot steers. Exposed to Arochlor 1260 in transformer oil used as backrubber for about 5 mos. Kansas CATTLE; STEERS; KANSAS; ADIPOSE TISSUE; BIOACCUMULATION; PESTICIDE RESIDUES; POLYCHLORINATED BIPHENYLS	Ross, P.F. Osheim, D.L. Nelson, H.A. 1981 Bulletin of Environmental Contamination and Toxicology 26:485-488

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
49 Eggs		GC-EC	a) 3 b) 3 c) 3 d) 5 e) 1 f) 2 g) 3 h) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.86 ppm b) 0.39 ppm c) 0.20 ppm d) 0.69 ppm e) 0.14 ppm f) 1.4 ppm g) 0.11 ppm h) 0.35 ppm Wet wt	8 clutches, significantly different ($P < 0.05$) Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDI; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, F.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Eider, common

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
50 Eggs		GC	30	0.38-4.30 ppm wet wt	1.60 + or - 1.08 ppm wet wt	Ratcliffe index 1.94-2.38, shell thickness 0.37-0.50 mm, shell wt 7.14-9.99 g, lipid content 15.07-18.02%. Collected 5/77. Maine, Bangs Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gannet, Norwegian
SORUS BASSANUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
51 Eggs		GC	a) 10 b) 11	a) 2.1-17 ppm b) 1.8-7.8 ppm Wet wt	a) 7.7 + or - 4.6 ppm b) 3.5 + or - 1.7 ppm Wet wt	a) 1972 b) 1978 Significant decrease in 6 yr period ($P<0.01$) No major industries in vicinity of gannetry. Norway, Nordsjele BIRDS; GANNETS; DDE; MERCURY; CHLORINATED BIPHENYLS; BIOACCUMULATION; NORWAY; EGGS	Fimreite, N. Kveseth, N. Brevik, E.M. 1980 Bulletin of Environmental Contaminat on and Toxicology 24:142-144

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
52 Eggs		GC	28	8.0-130.00 ppm wet wt	30.96 + or - 22.3 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gull, herring
LARUS ARGENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
53 Eggs		GC	a) 30 b) 28	a) 0.00-32.00 ppm b) 0.13-16.70 ppm Wet wt	a) 7.76 + or - 6.68 ppm b) 9.06 + or - 3.59 ppm Wet wt	a) Ratcliffe index 1.53-1.98, shell thickness 0.34-0.47 mm, shell wt 5.07-7.49 g, lipid conten 6.10-10.20% b) Ratcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.64 g, lipid content 6.2-9.7% Collected 5/77. Maine, Appledore Island Virginia, Fisherman Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DEC; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Mink
MUSTELA VISON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
54 Adipose	Ingestion	NA	a) 12 b) 11	a) Not given b) Not given	a) 14 + or - 1.9 mg/g b) 310 + or - 25 mg/g	a) Controls on standard feed containing 0.05 ppm PCB b) Animals fed daily doses of 3300 ug (11 ppm) PCB for 66 days In extractable fat Animals killed 1 wk after parturition, age 1 yr MINK; CADMIUM; MERCURY; POLYCHLORINATED BIPHENYLS; SWEDEN; ADIPOSE TISSUE; KIDNEYS; MUSCLES; BIOACCUMULATION	Olsson, M. Kihlstrom, J.E. Jensson, S. Orberg, J. 1979 Ambio 8(1):25

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
55 Adipose	Placental	GC/MS	1	Not applicable	50 ng/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DEE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

(NEXT PAGE)

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Porpoise, harbor
PHOCOENA PHOCOENA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
56 Kidney	Placental	GC/MS	1	Not applicable	34 ug/g wet wt	In extractable lipids. Kidney lipid content 4.5% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DEE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
57 Liver	Placental	GC/MS	1	Not applicable	50 ug/g wet wt	In extractable lipids. Liver lipid content 2% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DEE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Shad, American
ALOSA SAPIDISSIMA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
58 Muscle		GC-EC	a) 20 b) 32	a) 0.9-11.7 ug/g b) 1.9-19.0 ug/g Wet wt	a) 2.0 + or - 1.0 ug/g b) 5.1 + or - 2.7 ug/g Wet wt	a) Tappan Zee, 27 mi from river mouth. Mean length 47.9 cm b) Poughkeepsie, 75 mi from river mouth. Mean length 52.9 cm Collected spring '77. New York, Hudson River NEW YORK; MUSCLES; BIOACCUMULATION; BIOINDICATORS; FISHES; WATER POLLUTION; POLYCHLORINATED BIPHENYLS	Pastel, H. Bush, B. Kim, J.S. 1980 Pesticides Monitoring Journal 14(1):11-22

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Snake, garter
THAMNOPHIS SIRTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
59 Body, whole			6	1.3-5.8 ppm wet wt	2.9 ppm wet wt	Snout-vent length 646-752 mm, lipid content 3.2-9.0%. Nestling birds in stomachs of 3 snakes contained 0.85-1.3 ppm. Lake Michigan, Spider Island SNAKES; MARYLAND; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; MERCURY; POLYCHLORINATED BIPHENYLS	Heinz, G.H. Haseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:738-743

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Snake, water
NERODIA SIPEDON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
60 Body, whole			1	Not applicable	4.3 ppm wet wt	Snout-vent length 855 mm, 6.2% lipid content Lake Michigan, Pilot Island SNAKES; MARYLAND; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; MERCURY; POLYCHLORINATED BIPHENYLS	Heinz, G.H. Haseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:738-743

Biphenyl, chloro (8 Cl)
1,1'-Biphenyl, chloro deriva (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Trout, lake
SALVELINUS NAMAYCUSH

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
61 Adipose		GC/MS	8	0.37-0.69 ug/g wet wt	0.50 ug/g wet wt	Mesentery fat Collected summer '77 in reservoir and lake area above Churchill Falls power plant. Canada, Labrador, Churchill Falls SEWER PLANTS; CANADA; ADULTS; ADIPOSE TISSUE; LIVER; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION	Musial, C.J. Uthe, J.F. Wiseman, E.J. Matheson, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:256-261

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Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Trout, lake
SALVELINUS NAMAYCUSH

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
62 Muscle		GC	a) 10 b) 10 c) 10	a) Not given b) Not given c) Not given	a) 140 + or - 70 ug b) 90 + or - 40 ug c) 80 + or - 30 ug	a) Raw b) Irradiated with Co 60 source, 1000 kilorads (38% PCB loss) c) Irradiated and broiled to internal temperature of 75 C (43% PCB loss) Fillet Fish wt 0.8-1.2 kg, length 45-52 cm Michigan, Great Lakes BIOACCUMULATION; FISHES; FOOD CONTAMINATION; IRRADIATION; WATER POLLUTION; POLYCHLORINATED BIPHENYLS; MUSCLES; MICHIGAN	Cichy, E.F. Zabik, M.E. Weaver, C.M. 1979 Bulletin of Environmental Contamination and Toxicology 22:807-812

Boron
7440-42-8
B
AtW 10.81, MP 2200 (approx), BP 2550 C, VP 1.56X10(E-5) atm at 2140 C, 1 mm Hg at 2660 C, 10 mm Hg at 3030 C
Deer, mule
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
63 Bone		Colorimetry	a) 12 b) 6	a) 0.8-1.8 ppm b) 1.2-3.6 ppm Dry wt	a) 1.4 + or - 0.3 ppm b) 1.2 + or - 3.6 ppm Dry wt	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Metacarpus Significant difference in levels between age groups (P<0.05) Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182

Boron
7440-42-8
B
AtW 10.81, MP 2200 C (approx), BP 2550 C, VP 1.56X10(E-5) atm at 2140 C, 1 mm Hg at 2660 C, 10 mm Hg at 3030 C
Mouse, deer
PEROMYSCUS MANICULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
64 Bone		Colorimetry	a) 45 b) 45 c) 45	a) Not given b) Not given c) Not given	a) < or = 2 ppm b) < or = 2 ppm c) < or = 2 ppm Dry wt	(a) Pinyon-juniper habitat (b) Mountain shrub habitat (c) Big sagebrush habitat Captured 6/78 near oil shale tracts before mining initiated Whole skeleton. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 4[illegible] C
Antelope, pronghorn
ANTILOCAPRA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
65 Kidney		AAS	21	Not given	1.27 + or - 1.06 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Trend of accumulation with age (P=0.10). Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains CERV; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
66 Liver		AAS	20	Not given	0.30 + or - 0.15 ug/g dry wt	Ages < 10-85 mo Animals assumed to be healthy Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains CERV; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKAL; ZINC	Hunshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Bluegill
LEPOMIS MACROCHIRUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
67 Body, whole		AAS	61	Not given	0.2 ug/g	Fishes, mean length 95 mm, mean dry wt 16.40 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. Concentration increase with increasing fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Cadmium
7440-43-9
Cd
AtW 112.40, BP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Fathead, black
ICTALURUS MELAS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
68 Body, whole		AAS	10	Not given	0.3 ug/g	Fishes, mean length 172 mm, mean dry wt 61.59 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vimikour, K.S. Goldstein, R.M. Anderson, R.V. 1988 Bulletin of Environmental Contamination and Toxicology 20:727-734

Cadmium
7440-43-9
Cd
AtW 112.40, BP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
69 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.02 + or - 0.002 ppm b) < 0.01 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 186 days Hereford yearlings, mean wt 336 kg. Slaughtered at 660 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
70 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) < 0.013 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 186 days Hereford yearlings, mean wt 336 kg. Slaughtered at 660 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
71 Kidney		AAS	190	0.02-10.7 ppm wet wt	0.43 + or - 1.07 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.T. 1979 Journal of the Science of Food and Agriculture 30:503-507

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Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Cattle
BCS ep.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
72 Kidney	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 1.19 + or - 0.14 ppm b) 10.55 + or - 0.24 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < 0.1) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Carter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
73 Kidney	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 1.25 ppm b) 9.86 ppm wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
74 Liver		AAS	190	< 0.005-0.80 ppm wet wt	0.08 + or - 0.10 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.T. 1979 Journal of the Science of Food and Agriculture 30:503-507
75 Liver	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 0.19 + or - 0.1 ppm b) 4.92 + or - 0.84 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < 0.1) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Carter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

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Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
76 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.23 ppm b) 0.25 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
77 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.05 + or - 0.1 ppm b) 0.48 + or - 0.05 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase ($P < 0.1$) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
78 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) 0.33 + or - 0.01 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
79 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.06 ppm b) 0.08 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

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Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
80 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.02 + or - 0 ppm b) 0.43 + or - 0.03 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < 0.1) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Clam, surf
SPISULA SOLIDISSIMA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
81 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 0.23 + or - 0.07 ppb b) 0.32 + or - 0.11 ppb c) 0.50 + or - 0.16 ppb d) 0.25 + or - 0.09 ppb e) 0.44 + or - 0.14 ppb f) 0.93 + or - 0.38 ppb g) 0.17 + or - 0.05 ppb h) 0.22 + or - 0.10 ppb i) 0.19 + or - 0.09 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Cd-seawater solutions, a)-f) Controls, in seawater Shells removed before analysis BIVALVES; CADMIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; ECOL; COMPARATIVE EVALUATIONS; CONNECTICUT	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647

Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Crappie, black
POMOXIS NIGROMACULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
82 Body, whole		AAS	26	Not given	0.2 ug/g	Fishes, mean length 109 mm, mean dry wt 18.09 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Deer, mule
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
83 Kidney		AAS	24	Not given	2.70 + or - 3.00 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Significant increase with age (P=0.001). Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshover, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
84 Liver		AAS	30	Not given	0.51 + or - 0.53 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshover, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Grouse, ruffed
BONASSA UMBELLUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
85 Feathers		AAS	130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1.2 + or - 1.2 ug/g b) 0.04 + or - 0.01 ug/g c) 1.1 + or - 1.0 ug/g d) 0.02 + or - 0.01 ug/g e) 0.05 + or - 0.01 ug/g f) 2.0 + or - 1.2 ug/g Dry wt	a) 77 adults b) 53 juveniles c) 88 males d) 42 females e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest Wing and tail feathers Birds shot by hunters in remote forest area. Virginia (SW) BIRDS; FEATHERS; JUVENILES; CADMIUM; COPPER; LEAD; NICKEL; SILVER; ZINC; VIRGINIA; ADULTS	Scanlon, P.F. Oderwald, R.G. Dietrick, T.J. Coggin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25:947-949

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Mink
MUSTELA VISON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
86 Kidney	Ingestion	NA	a) 12 b) 11	a) Not given b) Not given	a) 260 + or - 30 ug/g b) 410 + or - 70 ug/g	a) Controls on standard feed containing 0.05 ppm PCB b) Animals fed daily doses of 3300 ug (11 ppm) PCB for 66 days Animals killed 1 wk after parturition, age 1 yr Results indicate synergism of Cd and PCB MINK; CADMIUM; MERCURY; POLYCHLORINATED BIPHENYLS; SWEDEN; ADIPOSE TISSUE; KIDNEYS; MUSCLES; BIOACCUMULATION	Olsson, M. Kihlstrom, J.E. Jensen, S. Orberg, J. 1979 Ambio 8(1):25

Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Oyster
CRASSOSTREA VIRGINICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
87 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 2.9 + or - 0.87 ppb b) 4.7 + or - 0.74 ppb c) 7.5 + or - 1.53 ppb d) 4.2 + or - 0.94 ppb e) 7.1 + or - 2.28 ppb f) 15.2 + or - 4.31 ppb g) 1.8 + or - 0.22 ppb h) 1.6 + or - 0.40 ppb i) 1.9 + or - 0.44 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Cd-seawater solutions, a)-f) Controls, in seawater Shells removed before analysis BIVALVES; CADMIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; BODY; COMPARATIVE EVALUATIONS; CONNECTICUT	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647

Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Perch, yellow
PERCA FLAVESCENS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
88 Body, whole		AAS	40	Not given	0.2 ug/g	Fishes, mean length 104 mm, mean dry wt 11.22 g, collected downstream of flood control weir at Algonquin. No major effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.S. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Quahog
ARCTICA ISLANDICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
89 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 0.31 + or - 0.07 ppb b) 0.37 + or - 0.06 ppb c) 0.55 + or - 0.20 ppb d) 0.36 + or - 0.15 ppb e) 0.37 + or - 0.11 ppb f) 0.72 + or - 0.21 ppb g) 0.25 + or - 0.10 ppb h) 0.27 + or - 0.09 ppb i) 0.31 + or - 0.15 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Cd-seawater solutions, a)-f) Controls, in seawater Shells removed before analysis MOLLUSKS; CADMIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; BODY; COMPARATIVE EVALUATIONS; CONNECTICUT	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sheep
OVIS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
90 Bone	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 0.02 + or - 0.002 ppm b) 0.01 + or - 0.001 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Lisk, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
91 Brain	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 0.02 + or - 0.00 ppm b) 0.01 + or - 0.00 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Lisk, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61

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Cadmium
7440-43-9
Cd
Atm 112.40, BP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sheep
OVIS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
92 Heart	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 0.03 + or - 0.00 ppm b) 0.01 + or - 0.00 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.H. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Link, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
93 Kidney	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 18.5 + or - 1.0 ppm b) 5.4 + or - 0.8 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.H. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Link, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
94 Liver	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 5.8 + or - 0.3 ppm b) 1.2 + or - 0.2 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.H. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Link, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61

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Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sheep
OVIS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
95 Muscle	Ingestion	ASV	14	a) Not given b) Not given c) Not given d) Not given	a) 0.01 + or - 0.002 ppm b) 0.01 + or - 0.001 ppm c) 0.004 + or - 0.001 ppm d) 0.005 + or - 0.001 ppm Dry wt	a) Animals fed sludge-grown crop, 9 samples (chuck) b) Animals fed sludge-grown crop, 9 samples (round) c) Animals fed control crop, 5 samples (chuck) d) Animals fed control crop, 5 samples (round) Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Lisk, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
96 Spleen	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 0.23 + or - 0.02 ppm b) 0.04 + or - 0.00 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Lisk, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61

Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Spot
LEIOSTOMUS XANTHURUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
97 Brain		AAS	a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1.82 + or - 0.33 ug/g b) 2.66 + or - 0.83 ug/g c) 1.16 + or - 0.23 ug/g d) 1.08 + or - 0.18 ug/g e) 0.91 + or - 0.19 ug/g f) 0.65 + or - 0.11 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures Fish length 12 + or - 2.2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm. GILLS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; ALABAMA; KIDNEY DISEASES; METAL POISONING; BIOACCUMULATION; WATER POLLUTION; FISHES; CADMIUM	Hawkins, W.E. Tate, L.G. Sarphie, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295
98 Gills		AAS	a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 3.03 + or - 0.93 ug/g b) 8.56 + or - 4.30 ug/g c) 4.50 + or - 1.50 ug/g d) 7.53 + or - 2.70 ug/g e) 10.57 + or - 3.68 ug/g f) 1.54 + or - 0.50 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures Fish length 12 + or - 2.2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm. GILLS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; ALABAMA; KIDNEY DISEASES; METAL POISONING; BIOACCUMULATION; WATER POLLUTION; FISHES; CADMIUM	Hawkins, W.E. Tate, L.G. Sarphie, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295
99 Gut		AAS	a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 4.11 + or - 1.70 ug/g b) 8.28 + or - 1.31 ug/g c) 45.07 + or - 14.10 ug/g d) 52.20 + or - 18.30 ug/g e) 28.54 + or - 2.90 ug/g f) 1.54 + or - 0.23 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures Fish length 12 + or - 2.2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm. GILLS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; ALABAMA; KIDNEY DISEASES; METAL POISONING; BIOACCUMULATION; WATER POLLUTION; FISHES; CADMIUM	Hawkins, W.E. Tate, L.G. Sarphie, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295

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Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
fpot
LEIOSTOMUS XANTHURUS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
100 Heart		AAS	a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 2.49 + or - 0.33 ug/g b) 5.64 + or - 1.16 ug/g c) 17.72 + or - 6.54 ug/g d) 28.29 + or - 7.90 ug/g e) 32.34 + or - 7.89 ug/g f) 2.00 + or - 0.45 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures Fish length 12 + or - 2.2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm. GILLS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; ALABAMA; KIDNEY DISEASES; METAL POISONING; BIOACCUMULATION; WATER POLLUTION; FISHES; CADMIUM	Hawkins, W.E. Tate, L.G. Sarphie, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295
101 Kidney		AAS	a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 3.70 + or - 0.30 ug/g b) 15.49 + or - 4.69 ug/g c) 12.35 + or - 4.65 ug/g d) 23.02 + or - 6.95 ug/g e) 20.18 + or - 8.20 ug/g f) 0.70 + or - 0.14 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures Fish length 12 + or - 2.2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm. GILLS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; ALABAMA; KIDNEY DISEASES; METAL POISONING; BIOACCUMULATION; WATER POLLUTION; FISHES; CADMIUM	Hawkins, W.E. Tate, L.G. Sarphie, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295
102 Liver		AAS	a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 8.04 + or - 2.79 ug/g b) 11.10 + or - 1.70 ug/g c) 22.72 + or - 10.70 ug/g d) 60.88 + or - 9.99 ug/g e) 166.35 + or - 83.90 ug/g f) 1.25 + or - 0.38 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures Fish length 12 + or - 2.2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm. GILLS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; ALABAMA; KIDNEY DISEASES; METAL POISONING; BIOACCUMULATION; WATER POLLUTION; FISHES; CADMIUM	Hawkins, W.E. Tate, L.G. Sarphie, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295

(NEXT PAGE)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Spot
LEIOSTOMUS XANTHURUS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
103 Muscle		AAS	a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 2.84 + or - 1.91 ug/g b) 2.43 + or - 0.45 ug/g c) 0.64 + or - 0.04 ug/g d) 1.00 + or - 0.44 ug/g e) 0.75 + or - 0.83 ug/g f) 0.77 + or - 0.22 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures Fish length 12 + or - .2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm. GILLS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; ALABAMA; KIDNEY DISEASES; METAL POISONING; BIOACCUMULATION; WATER POLLUTION; FISHES; CADMIUM	Hawkins, W.E. Tate, L.G. Sarphie, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
104 Adrenal gland	Injection	AAS	3	13.8-20.8 ug/g wet wt	17.25 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; FATS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
105 Bile	Injection	AAS	3	0.02-0.12 ug/g wet wt	0.06 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; FATS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
106 Brain	Injection	AAS	3	0.01-0.39 ug/g wet wt	0.24 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; FATS; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115

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Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Swine
SUS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
107 Heart	Injection	AAS	3	1.50-3.47 ug/g wet wt	2.58 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
108 Intestine	Injection	AAS	3	a) 4.82-6.8 ug/g b) 3.56-4.56 ug/g c) 4.46-4.97 ug/g d) 4.23-5.57 ug/g e) 3.43-4.78 ug/g f) 1.89-3.16 ug/g Wet wt	a) 6.13 ug/g b) 3.90 ug/g c) 4.75 ug/g d) 5.06 ug/g e) 4.23 ug/g f) 2.71 ug/g Wet wt	a) Duodenum b) Colon c) Ileum d) Jejunum e) Cecum f) Rectum Castrated pigs 0.2 mg CdCl2/kg, IM body wt 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
109 Kidney	Injection	AAS	3	122-210 ug/g wet wt	171 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
110 Liver	Injection	AAS	3	206-[illegible] ug/g wet wt	216 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
111 Lung	Injection	AAS	3	8.90-14.60 ug/g wet wt	11.11 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115

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Cadmium
7440-43-9
Cd
Atm 112.40, BP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Swine
SUS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
112 Muscle	Injection	AAS	3	a) 0.65-1.59 ug/g b) 0.43-2.44 ug/g Wet wt	a) 1.06 ug/g b) 1.45 ug/g Wet wt	a) Skeletal muscle b) Skeletal muscle, injection site Castrated pigs 0.2 mg CdCl2/kg body wt SC/wk, IM for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Ithe, J.F. Proctor, B.G. Choy, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
113 Pancreas	Injection	AAS	3	76.7-89.9 ug/g wet wt	82.7 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM SC/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Ithe, J.F. Proctor, B.G. Choy, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
114 Pituitary	Injection	AAS	3	7.7-10.9 ug/g wet wt	8.8 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM SC/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Ithe, J.F. Proctor, B.G. Choy, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
115 Salivary gland	Injection	AAS	3	10.82-15.8 ug/g wet wt	13.61 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM SC/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Ithe, J.F. Proctor, B.G. Choy, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
116 Spleen	Injection	AAS	3	16.48-20.7 ug/g wet wt	18.11 wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM SC/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Ithe, J.F. Proctor, B.G. Choy, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115

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Cadmium
7440-43-9
Cd
Atw 112.40, BP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Swine
Sus sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
117 Stomach	Injection	AAS	3	7.08-10.18 ug/g wet wt	8.31 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. FIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART, INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
118 Thyroid gland	Injection	AAS	3	1.10-6.31 ug/g wet wt	4.10 ug/g wet wt	Castrated pigs 0.2 mg CdCl2/kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. FIGS; SALIVARY GLAND; ADRENAL GLANDS; BILE; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIES; CADMIUM; BIOACCUMULATION	Uthe, J.F. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115

Cesium, isotope of mass 137
10045-97-3
Cs
Atw 137, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C
Squirrel, gray
SCIURUS CAROLINENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
119 Muscle		Radiometry	a) 11 b) 17 c) 18 d) 18 e) 18 f) 6 g) 4 h) 20 i) 18 j) 8	a) 680-4,700 pCi/kg b) 250-29,000 pCi/kg c) 590-20,000 pCi/kg d) 300-20,000 pCi/kg e) 250-7,400 pCi/kg f) 4,200-29,000 pCi/kg g) 1,200-5,900 pCi/kg h) 590-20,000 pCi/kg i) 250-29,000 pCi/kg j) 780-12,000 pCi/kg Wet wt	a) 2,200 + or - 400 pCi/kg b) 5,000 + or - 1,700 pCi/kg c) 4,400 + or - 1,300 pCi/kg d) 4,200 + or - 1,300 pCi/kg e) 2,500 + or - 500 pCi/kg f) 11,000 + or - 4,000 pCi/kg g) 2,900 + or - 1,100 pCi/kg h) 4,200 + or - 1,200 pCi/kg i) 4,700 + or - 1,600 pCi/kg j) 3,500 + or - 1,300 pCi/kg Wet wt	a) low income stratum b) Middle income stratum c) High income stratum d) Residential area e) Park f) School g) Cemetery h) Age <1 yr i) Age 1 yr j) Age 2 yr or older Animals captured from 36 urban sites in 1974 Significantly lower values in low-income areas, parks, cemeteries than in school areas. Florida, Jacksonville SQUIRRELS; BIOACCUMULATION; RADIOISOTOPES; URBAN AREAS; CESIUM; MERCURY; HAIR; MUSCLES; FLORIDA; AGE	Jenkins, J.H. Davis, A.H. Bigler, W.J. Hoff, G.L. 1980 Bulletin of Environmental Contamination and Toxicology 25:321-324

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C
Cattle
BCS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
120 Kidney		AAS	190	Not detected-0.22 ppm wet wt	0.03 + or - 0.04 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
121 Liver		AAS	190	< 0.02-1.0 ppm wet wt	0.05 + or - 0.12 ppm w	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

Cobalt
7440-48-4
Co
AtW 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C
Cattle
BCS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
122 Kidney		AAS	190	Not detected-0.25 ppm wet wt	0.03 + or - 0.03 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
123 Liver		AAS	190	< 0.03-0.45 ppm wet wt	0.07 + or - 0.05 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

Copper
7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Antelope, pronghorn
ANTILOCAPRA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
124 Kidney		AAS	21	Not given	13.3 + or - 2.8 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains ANTELOPE; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
125 Liver		AAS	20	Not given	26.9 + or - 12.8 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains ANTELOPE; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Copper
7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Bluegill
LEPOMIS MACROCHIRUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
126 Body, whole		AAS	61	Not given	16.5 ug/g	Fishes, mean length 95 mm, mean dry wt 16.40 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vimikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Copper
7440-50-8
Cu
AtW 63.546, BP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Bullhead, black
ICTALURUS MELAS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
127 Body, whole		AAS	10	Not given	15.8 ug/g	Fishes, mean length 172 mm, mean dry wt 41.59 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vimikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Copper
7440-50-8
Cu
AtW 63.546, BP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Catfish, channel
ICTALURUS PUNCTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
128 Blood, cells	Ingestion		9	a) Not given b) Not given	a) 0.37 + or - 0.04 ug/g b) 0.41 + or - 0.09 ug/g Dry wt	a) Unsupplemented diet b) Diet with 32 mg supplemental Cu/kg for 16 wk Erythrocytes Initial mean wt 14.5 + or - 1.4 g Diminished growth and feed conversion, reduced hematocrit levels and erythrocyte counts, slight anemia. GEORGIA; BLOOD PLASMA; ERYTHROCYTES; LIVER; MUSCLES; BIOACCUMULATION; LIMITS; FISHES	Murai, T. Andrews, J.W. Smith, R.G., Jr. 1981 Aquaculture 22:353-357
129 Blood, plasma	Ingestion		9	a) Not given b) Not given	a) 0.58 + or - 0.17 ug/ml b) 0.62 + or - 0.23 ug/ml	a) Unsupplemented diet b) Diet with 32 mg supplemental Cu/kg for 16 wk Initial mean wt 14.5 + or - 1.4 g Diminished growth and feed conversion, reduced hematocrit levels and erythrocyte counts, slight anemia. GEORGIA; BLOOD PLASMA; ERYTHROCYTES; LIVER; MUSCLES; BIOACCUMULATION; LIMITS; FISHES	Murai, T. Andrews, J.W. Smith, R.G., Jr. 1981 Aquaculture 22:353-357
130 Liver	Ingestion		9	a) Not given b) Not given	a) 5.0 + or - 1.0 ug/g b) 9.2 + or - 1.2 ug/g Dry wt	a) Unsupplemented diet b) Diet with 32 mg supplemental Cu/kg for 16 wk Initial mean wt 14.5 + or - 1.4 g Diminished growth and feed conversion, reduced hematocrit levels and erythrocyte counts, slight anemia. GEORGIA; BLOOD PLASMA; ERYTHROCYTES; LIVER; MUSCLES; BIOACCUMULATION; LIMITS; FISHES	Murai, T. Andrews, J.W. Smith, R.G., Jr. 1981 Aquaculture 22:353-357

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Copper
7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Catfish, channel
ICTALURUS PUNCTATUS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
131 Muscle	Ingestion		9	a) Not given b) Not given	a) 1.4 + or - 0.2 ug/g b) 1.5 + or - 0.2 ug/g Dry wt	a) Unsupplemented diet b) Diet with 32 mg supplemental Cu/kg for 16 wk Initial mean wt 14.5 + or - 1.4 g Diminished growth and feed conversion, reduced hematocrit levels and erythrocyte counts, slight anemia. GEORGIA; BLOOD PLASMA; ERYTHROCYTES; LIVER; MUSCLES; BIOACCUMULATION; LIPIS; FISHES	Murai, T. Andrews, J.W. Smith, R.G., Jr. 1981 Aquaculture 22:353-357

Copper
7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
132 Blood	Ingestion	AAS	20	a) 0.160-0.920 ppm b) 0.708-1.272 ppm c) 0.155-0.460 ppm d) 0.618-1.314 ppm	a) 0.605 ppm b) 1.023 ppm c) 0.303 ppm d) 0.991 ppm	a) Pastures fertilized with treated raffinate, pre-test b) Pastures fertilized with treated raffinate, post-test c) Controls, pre-test d) Controls, post-test Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
133 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.37 + or - 0.4 ppm b) 1.48 + or - 1.16 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Barter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
134 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 5.2 + or - 0.5 ppm b) 5.7 + or - 0.8 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Barter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

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Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Cattle
ECS ap.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
135 Kidney		AAS	190	1.84-9.2 ppm wet wt	3.90 + or - 0.98 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
136 Kidney	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 23 + or - 0.5 ppm b) 21 + or - 0.04 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
137 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 9.52 ppm b) 5.16 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
138 Liver		AAS	190	0.81-82.8 ppm wet wt	18.0 + or - 15.6 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
139 Liver	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 127 + or - 27 ppm b) 113 + or - 32 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

(NEXT PAGE)

Copper
7440-50-8
Cu
Atm 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Cattle
BCS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
140 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 27.17 ppm b) 35.35 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
141 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 7.1 + or - 0.2 ppm b) 7.1 + or - 0.4 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
142 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 3.6 + or - 0.43 ppm b) 3.2 + or - 0.18 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
143 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 5.07 ppm b) 3.42 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

(NEXT PAGE)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
144 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 4.4 + or - 0.14 ppm b) 4.8 + or - 0.20 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 306 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Harter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Clam, surf
SPISULA SOLIDISSIMA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
145 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 1.8 + or - 0.43 ppb b) 2.7 + or - 1.18 ppb c) 3.2 + or - 0.71 ppb d) 2.9 + or - 1.17 ppb e) 3.8 + or - 0.94 ppb f) 6.9 + or - 2.38 ppb g) 1.1 + or - 0.28 ppb h) 0.7 + or - 0.32 ppb i) 1.1 + or - 0.34 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Cu-seawater solutions, a)-f) Controls, in seawater Shells removed before analysis MOLLUSKS; CADMIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; ECOLOGY; COMPARATIVE EVALUATIONS; CONNECTICUT	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Crappie, black
POMOXIS NIGROMACULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
146 Body, whole		AAS	26	Not given	27.5 ug/g	Fishes, mean length 109 mm, mean dry wt 18.09 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.S. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Copper
7440-50-8
Cu
At# 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Crayfish
ORCONECTES RUSTICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
147 Abdomen		AAS	a) 4 b) 4 c) 4 d) 4 e) 4 f) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 85 ppm b) 120 ppm c) 130 ppm d) 160 ppm e) 210 ppm f) 260 ppm	a) At 0 ppm b) At 0.1 ppm c) At 0.5 ppm d) At 1.0 ppm e) At 2.0 ppm f) At 3.0 ppm 48 hr exposure levels Adults, acclimated to 25 C in pond water for 24 hr before exposure. Ohio, Reily, Indian Creek CRAYFISH; BIOACCUMULATION; BIOINDICATORS; METALS; COPPER; OHIO; ADULTS; BODY	Evans, M.I. 1980 Bulletin of Environmental Contamination and Toxicology 24:916-920
148 Body, whole		AAS	66	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 120 ppm b) 130 ppm c) 170 ppm d) 180 ppm e) 220 ppm f) 250 ppm	a) At 0 ppm b) At 0.1 ppm c) At 0.5 ppm d) At 1.0 ppm e) At 2.0 ppm f) At 3.0 ppm 48 hr exposure levels Adults, acclimated to 25 C in pond water for 24 hr before exposure. Ohio, Reily, Indian Creek CRAYFISH; BIOACCUMULATION; BIOINDICATORS; METALS; COPPER; OHIO; ADULTS; BODY	Evans, M.I. 1980 Bulletin of Environmental Contamination and Toxicology 24:916-920
149 Claws		AAS	a) 4 b) 4 c) 4 d) 4 e) 4 f) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 77 ppm b) 89 ppm c) 120 ppm d) 120 ppm e) 150 ppm f) 170 ppm	a) At 0 ppm b) At 0.1 ppm c) At 0.5 ppm d) At 1.0 ppm e) At 2.0 ppm f) At 3.0 ppm 48 hr exposure levels Adults, acclimated to 25 C in pond water for 24 hr before exposure. Ohio, Reily, Indian Creek CRAYFISH; BIOACCUMULATION; BIOINDICATORS; METALS; COPPER; OHIO; ADULTS; BODY	Evans, M.I. 1980 Bulletin of Environmental Contamination and Toxicology 24:916-920
150 Thorax		AAS	a) 4 b) 4 c) 4 d) 4 e) 4 f) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 180 ppm b) 210 ppm c) 250 ppm d) 280 ppm e) 300 ppm f) 350 ppm	a) At 0 ppm b) At 0.1 ppm c) At 0.5 ppm d) At 1.0 ppm e) At 2.0 ppm f) At 3.0 ppm 48 hr exposure levels Adults, acclimated to 25 C in pond water for 24 hr before exposure. Ohio, Reily, Indian Creek CRAYFISH; BIOACCUMULATION; BIOINDICATORS; METALS; COPPER; OHIO; ADULTS; BODY	Evans, M.I. 1980 Bulletin of Environmental Contamination and Toxicology 24:916-920

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Deer, mule
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
151 Kidney		AAS	24	Not given	29.5 + or - 16.4 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshover, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
152 Kidney		AAS	a) 12 b) 6	a) 15-65 ppm b) 23-32 ppm Dry wt	a) 28.6 + or - 15.0 ppm b) 26.5 + or - 4.0 ppm Dry wt	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182
153 Liver		AAS	29	Not given	46.3 + or - 29.1 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshover, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
154 Liver		AAS	a) 12 b) 6	a) 19-114 ppm b) 45-227 ppm Dry wt	a) 61.4 + or - 34.0 ppm b) 97.3 + or - 59.6 ppm Dry wt	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Grouse, ruffed
BONASSA UMBELLUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
155 Feathers		AAS	130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 4.0 + or - 0.2 ug/g b) 4.4 + or - 0.4 ug/g c) 4.4 + or - 0.3 ug/g d) 3.6 + or - 0.2 ug/g e) 3.9 + or - 0.2 ug/g f) 4.6 + or - 0.4 ug/g Dry wt	a) 77 adults b) 53 juveniles c) 88 males d) 42 females e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest Wing and tail feathers Birds shot by hunters in remote forest area. Virginia (SW) BIRDS; FEATHERS; JUVENILES; CADMIUM; COPPER; LEAD; NICKEL; SILVER; ZINC; VIRGINIA; ADULTS	Scanlon, P.F. Oderwald, R.G. Dietrick, T.J. Coggin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25:947-949

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Mouse, deer
PEROMYSCUS MANICULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
156 Kidney		AAS	a) 45 b) 45 c) 45	a) 18-37 ppm b) 18-26 ppm c) 21-27 ppm Dry wt	a) 22.0 + or - 4.4 ppm b) 22.7 + or - 2.3 ppm c) 22.6 + or - 2.1 ppm Dry wt	a) Pinyon-juniper habitat b) Mountain shrub habitat c) Big sagebrush habitat Captured 6/78 near oil shale tracts before mining initiated Organ of choice for baseline sampling. DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182
157 Liver		AAS	a) 45 b) 45 c) 45	a) 19-29 ppm b) 20-622 ppm c) 18-249 ppm Dry wt	a) 23.3 + or - 2.4 ppm b) 75.4 + or - 146.9 ppm c) 40.1 + or - 56.0 ppm Dry wt	a) Pinyon-juniper habitat b) Mountain shrub habitat c) Big sagebrush habitat Captured 6/78 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Oyster

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
158 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 60.9 + or - 23.1 ppb b) 67.2 + or - 14.8 ppb c) 84.3 + or - 23.0 ppb d) 67.0 + or - 20.9 ppb e) 87.7 + or - 25.7 ppb f) 117.7 + or 20.5 ppb g) 60.3 + or - 13.2 ppb h) 58.1 + or - 21.7 ppb i) 69.5 + or - 27.5 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Cu-seawater solutions, a)-f) Controls, in seawater Shells removed before analysis MOLLUSKS; CADMIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; ECOLOGY; COMPARATIVE EVALUATIONS; CONNECTICUT	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647
159 Body, whole				a) 11.1-46.3 ug/g b) 9.6-42.9 ug/g c) 13.7-246.0 ug/g d) 72.6-199.2 ug/g e) 4.8-37.8 ug/g f) 9.9-28.6 ug/g g) 5.1-14.4 ug/g h) 2.7-37.6 ug/g i) 8.9-36.2 ug/g j) 16.1-47.0 ug/g k) 1.5-7.9 ug/g Dry wt	a) 22.7 + or - 11.5 ug/g b) 25.4 + or - 10.7 ug/g c) 106.0 + or - 61.9 ug/g d) 115.7 + or - 43.1 ug/g e) 17.9 + or - 11.3 ug/g f) 16.8 + or - 6.7 ug/g g) 10.4 + or - 3.7 ug/g h) 16.3 + or - 15.4 ug/g i) 21.2 + or - 14.2 ug/g j) 29.9 + or - 14.7 ug/g k) 4.9 + or - 3.2 ug/g Dry wt	a) Wando River, mouth, 7 samples b) Wando River, mile 4, 6 samples c) Wando River, mile 8, 34 samples d) Wando River, mile 10, 8 samples e) Charleston Harbor, 10 samples f) South Wisby Creek, 6 samples g) North Santee Bay, 6 samples h) Fishing Creek, 4 samples i) St. Helena Sound, 4 samples j) Ashley River, 4 samples k) Bulls Bay, 3 samples Significantly higher levels in Wando River oysters than in others. Shipyard possible Cu source 2 or more oysters/sample. Mean sample wt 12.26 g. South Carolina, coast OYSTERS; SOUTH CAROLINA; BODY; COPPER; IRON; BIOACCUMULATION; WATER POLLUTION	Mathews, T.D. Payne, J.V. Davis, H.A. Simmons, D.R. 1979 Journal of Environmental Science and Health A14(8):683-698

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Perch, yellow
PERCA FLAVESCENS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
160 Body, whole		AAS	40	Not given	20 ug/g	Fishes, mean length 104 mm, mean dry wt 11.22 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Copper
7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Quahog
ARCTICA ISLANDICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
161 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 3.0 + or - 0.86 ppb b) 2.9 + or - 1.13 ppb c) 2.1 + or - 0.30 ppb d) 3.2 + or - 1.04 ppb e) 3.7 + or - 1.21 ppb f) 4.2 + or - 1.34 ppb g) 2.8 + or - 1.09 ppb h) 2.3 + or - 0.84 ppb i) 1.9 + or - 0.68 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Cu-seawater solutions, a)-f) Controls, in seawater Shells removed before analysis BIOASSAYS; CADMIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; ECIT; COMPARATIVE EVALUATIONS; CONNECTICUT	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647

Copper
7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Sheep
OVIS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
162 Blood, plasma		AAS	9	22.02-76.[illegible] umol/l	43.6 umol/l	From sick sheep on Nigerian government farm where carcnic Cu poisoning had occurred Normal levels 9.4-18.8 umol/l Nigeria, Narguba Jaundice, edema ears, anemia Congested liver, kidney lesions. Massive hemosiderin in kidneys, spleen and lymph nodes. KIDNEY DISEASES; LIVER DISEASES; METAL POISONING; COPPER; AFRICA; SHEEP	Edelstein, R.N. 1980 Tropical Animal Health and Production 12:69-76

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1620 C, 10 mm Hg at 1870 C
Swan, mute
CYGNUS OLOR

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
163 Kidney	Ingestion	AAS	a) 18 b) 11	a) 0-190 ug/g b) 11-42 ug/g Dry wt	a) 44 ug/g b) 165 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kingdom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
164 Liver	Ingestion	AAS	a) 18 b) 11	a) 290-9200 ug/g b) 680-6250 ug/g Dry wt	a) 3660 ug/g b) 2790 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kingdom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202

Copper
7440-50-8
Cu
At# 63.546, BP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
165 Blood, plasma	Ingestion		a) 9 b) 9	a) 1.7-3.0 ppm b) 1.5-2.9 ppm Wet wt	a) Not given b) Not given	From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO4 as growth promotant. Estimated death losses, 400 of 2000 pigs during 10.5 mo. Georgia (H) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, melena, weakness, pallor. Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, pale muscles, watery blood, reddened bone marrow, splenic myeloid metaplasia. SWINE; GEORGIA; METAL POISONING; BLOOD; BLOOD PLASMA; FECES; KIDNEYS; LIVER; ARSENIC; COPPER; LEAD; BIOACCUMULATION; FOOD ADDITIVES	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, N.V. Swalley, R.E. 1979 Journal of the American Veterinary Medical Association 174(6):616-619
166 Kidney	Ingestion		2	5.0-19.5 ppm wet wt	12.3 ppm wet wt	From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO4 as growth promotant. Estimated death losses, 400 of 2000 pigs during 10.5 mo. Georgia (H) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, melena, weakness, pallor. Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, pale muscles, watery blood, reddened bone marrow, splenic myeloid metaplasia. SWINE; GEORGIA; METAL POISONING; BLOOD; BLOOD PLASMA; FECES; KIDNEYS; LIVER; ARSENIC; COPPER; LEAD; BIOACCUMULATION; FOOD ADDITIVES	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, N.V. Swalley, R.E. 1979 Journal of the American Veterinary Medical Association 174(6):616-619

(NEXT PAGE)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Swine
SUS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
167 Liver	Ingestion		3	100-170 ppm wet wt	133.3 ppm wet wt	Significantly higher levels than in livers obtained from grocery stores (0.8-6.3 ppm) From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm $CuSO_4$ as growth promotant. Estimated death losses, 400 of 2000 pigs during 10.5 mo. Georgia (H) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, malena, weakness, pallor. Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, pale muscles, watery blood, reddened bone marrow, splenic myeloid metaplasia. SWINE; GEORGIA; METAL POISONING; BLOOD; BLOOD PLASMA; FECES; KIDNEYS; LIVER; ARSENIC; COPPER; LEAD; BIOACCUMULATION; FOOD ADDITIVES	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, A.V. Smalley, H.E. 1979 Journal of the American Veterinary Medical Association 174(6):616-619

Creosote
8001-58-9
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
BP 195-400 C
Lobster
HOMARUS AMERICANUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
168 Hepatopancreas			a) 2 b) 2 c) 2 d) 2 e) 2 f) 2	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 47,500 ug b) 23,700 ug c) 10,850 ug d) 7,120 ug e) 3,220 ug f) 670 ug Values/g lipid	a) 100 hr in 2.5 mg/l b) 165 hr in 1.3 mg/l c) 120 hr in 0.3 mg/l d) 100 hr in 0.3 mg/l e) 25 hr in 0.3 mg/l f) Controls in seawater Solutions in seawater Adults, wt 450 g Lobsters at 2.5 mg/l and 1.3 mg/l exposures died within 2 and 6 hr after sampling. LOBSTERS; CREOSOTE; HEPATOPANCREAS; CANADA; ADULTS; BIOACCUMULATION	McLeese, D.W. Metcalfe, C.D. 1976 Bulletin of Environmental Contamination and Toxicology 22:796-799

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
169 Adipose	Placental	GC/MS	1	Not applicable	0.3 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
170 Kidney	Placental	GC/MS	1	Not applicable	0.2 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
171 Liver	Placental	GC/MS	1	Not applicable	0.3 ug/g wet wt	In extractable lipids. Liver lipid content 21% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
172 Adipose	Placental	GC/MS	1	Not applicable	0.2 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6 Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
173 Kidney	Placental	GC/MS	1	Not applicable	1.5 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
174 Liver	Placental	GC/MS	1	Not applicable	21 ug/g wet wt	In extractable lipids. Liver lipid content 21% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C
Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
175 Blood, serum	Ingestion		1	Not given	0.002 ppm	Accidental contamination of food by insecticide spray (45% toxaphene and 2% lindane). Slobbering, vomiting, muscle tremors, staggering. Periodic convulsions. Death 2 hr after onset of symptoms. PIGS; KANSAS; AUTOPSIES; NERVOUS SYSTEM DISEASES; BLOOD SERUM; BRAIN; CHLORINATED HYDROCARBONS; INSECTICIDES; LINDANE; BIOACCUMULATION	Mount, M.E. Traffas, V. Hilleret, R.J. Oehme, F.W. 1980 Journal of the American Veterinary Medical Association 177(9):445-447
176 Brain	Ingestion		1	a) Not given b) Not given	a) 0.02 ppm b) 0.03 ppm	Accidental contamination of food by insecticide spray (45% toxaphene and 2% lindane). Slobbering, vomiting, muscle tremors, staggering. Periodic convulsions. Death 2 hr after onset of symptoms. PIGS; KANSAS; AUTOPSIES; NERVOUS SYSTEM DISEASES; BLOOD SERUM; BRAIN; CHLORINATED HYDROCARBONS; INSECTICIDES; LINDANE; BIOACCUMULATION	Mount, M.E. Traffas, V. Hilleret, R.J. Oehme, F.W. 1980 Journal of the American Veterinary Medical Association 177(9):445-447

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI)
Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- (9 CI)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
Earthworm

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
177 Body, whole			2	Not given	12 ppb	5 g earthworms/sample Collected near contaminated area 2 yr after explosion in chemical plant. MICE; TOADS; SNAKES; HARES; EARTHWORMS; ITALY; ADIPOSE TISSUE; PCDV; LIVER; HERBICIDES; INDUSTRIAL ACCIDENTS; CHLORINE ORGANIC COMPOUNDS	Fanelli, R. Castelli, M.G. Martelli, G.P. Moseda, A. Garattini, S. 1980 Bulletin of Environmental Contamination and Toxicology 24:460-462

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 Cl)
Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 Cl)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
Hare

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
178 Liver			5	2.7-13 ppb	7.7 ppb	Collected in and near contaminated area 2 yr after explosion in chemical plant. Italy, Seveso RICE; TOADS; SNAKES; HARES; EARTHWORMS; ITALY; ADIPOSE TISSUE; BODY; LIVER; HERBICIDES; INDUSTRIAL ACCIDENTS; CHLORINE ORGANIC COMPOUNDS	Fanelli, R. Castelli, M.G. Martelli, G.P. Moneda, A. Garattini, S. 1980 Bulletin of Environmental Contamination and Toxicology 24:460-462

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 Cl)
Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 Cl)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
House, field
MICROTUS ARVALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
179 Body, whole		GC/MS	14	0.07-49 ppb	4.5 ppb	Collected in contaminated area (0.010-12 ppt in top 7 cm of soil) 2 yr after explosion in chemical plant. Italy, Seveso RICE; TOADS; SNAKES; HARES; EARTHWORMS; ITALY; ADIPOSE TISSUE; BODY; LIVER; HERBICIDES; INDUSTRIAL ACCIDENTS; CHLORINE ORGANIC COMPOUNDS	Fanelli, R. Castelli, M.G. Martelli, G.P. Moneda, A. Garattini, S. 1980 Bulletin of Environmental Contamination and Toxicology 24:460-462

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 Cl)
Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 Cl)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
Snake

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
180 Adipose			1	Not applicable	16 ppb	Collected near contaminated area 2 yr after explosion in chemical plant. Italy, Seveso RICE; TOADS; SNAKES; HARES; EARTHWORMS; ITALY; ADIPOSE TISSUE; BODY; LIVER; HERBICIDES; INDUSTRIAL ACCIDENTS; CHLORINE ORGANIC COMPOUNDS	Fanelli, R. Castelli, M.G. Martelli, G.P. Moneda, A. Garattini, S. 1980 Bulletin of Environmental Contamination and Toxicology 24:460-462
181 Liver			1	Not applicable	2.7 ppb	Collected near contaminated area 2 yr after explosion in chemical plant. Italy, Seveso RICE; TOADS; SNAKES; HARES; EARTHWORMS; ITALY; ADIPOSE TISSUE; BODY; LIVER; HERBICIDES; INDUSTRIAL ACCIDENTS; CHLORINE ORGANIC COMPOUNDS	Fanelli, R. Castelli, M.G. Martelli, G.P. Moneda, A. Garattini, S. 1980 Bulletin of Environmental Contamination and Toxicology 24:460-462

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI)
Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)
1746-01-6
C12-H4-Cl4-O2
MW 322, MP 305 C
Toad

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
182 Body, whole			1	Not applicable	9.2 ppb	Collected near contaminated area 2 yr after explosion in chemical plant. Italy, Seveso FISH; TOADS; SNAKES; HARES; EARTHWORMS; ITALY; ADIPOSE TISSUE; BODY; LIVER; HERBICIDES; INDUSTRIAL ACCIDENTS; CHLORINE ORGANIC COMPOUNDS	Fanelli, R. Castelli, M.G. Martelli, G.P. Nomeda, A. Garattini, S. 1980 Bulletin of Environmental Contamination and Toxicology 24:460-462

Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI)
Benzene, 1-chloro-2-[2,2-dicaloro-1-(4-chlorophenyl)ethyl]- (9 CI)
53-19-0
C14-H10-Cl4
MW 320.05, MP 76-78 C
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
183 Adipose	Placental	GC/MS	1	Not applicable	2.5 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel CETACEAN; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:726-732
184 Kidney	Placental	GC/MS	1	Not applicable	1.3 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel CETACEAN; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:726-732
185 Liver	Placental	GC/MS	1	Not applicable	3.4 ug/g wet wt	In extractable lipids. Liver lipid content 2% Value for fetus (20 cm) of harbour porpoise stranded on beach in poor condition Netherlands, Texel CETACEAN; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:726-732

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
186 Eggs		GC-EC	a) 3 b) 3 c) 3 d) 5 e) 2 f) 3 g) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 0.04 ppm b) 0.05 ppm c) 0.01 ppm d) 0.07 ppm e) 0.01 ppm f) 0.04 ppm g) 0.05 ppm Wet wt	8 clutches, significantly different ($P < 0.05$) Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Ball, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Grebe, western
AECHMOPHORUS OCCIDENTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
187 Adipose		GC	18	0.5-16.4 ppm wet wt	5.2 ppm wet wt	Visceral fat Higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
189 Blood		GC	16	Not detected-0.20 ppm wet wt	0.07 ppm wet wt	Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
189 Eggs		GC	40	0.3-8.7 ppm wet wt (3-51 ppm lipid wt)	1.3 + or - ppm wet wt (14.9 + or - 3.1 ppm lipid wt)	Average shell thickness index 1.898 + or - 0.035 SE. 2.3% decrease from pre-DDT use period Collected 1973-74. Utah, Bear River Migratory Bird Refuge No detectable effects on reproduction. EGGS; BIRDS; UTAH; CHLORINE ORGANIC COMPOUNDS; DDE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES	Lindvall, M.L. Low, J.B. 1980 Pesticides Monitoring Journal 14(3):108-111

(NEXT PAGE)

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Grebe, western
AECHMOPHORUS OCCIDENTALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
190 Eggs		GC	40	1.0-21.4 ppm wet wt (20-275 ppm lipid wt)	6.6 ppm wet wt (76.5 ppm lipid wt)	Whole eggs Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
191 Muscle		GC	24	<0.1-6.0 ppm wet wt (2-171 ppm lipid wt)	0.8 ppm wet wt (29 ppm lipid wt)	Breast muscle Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-Cl4
MW 350.46, MP 221-222 C
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
192 Eggs		GC	28	0.0-0.15 ppm wet wt	0.01 + or - 0.01 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Ethane, 1,1-dichloro-2,2-bis(p-chlorphenyl)- (8 CI)
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-54-8
C14-H10-C14
MW 350.46, MP 221-222 C
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
193 Adipose	Placental	GC/MS	1	Not applicable	2.5 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
194 Kidney	Placental	GC/MS	1	Not applicable	1.5 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% wet wt Value for fetus (20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
195 Liver	Placental	GC/MS	1	Not applicable	3.5 ug/g wet wt	In extractable lipids. Liver lipid content 2% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
SC-29-3
C14-H9-C15
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
196 Eggs		GC-EC	a) 3 b) 3 c) 3 d) 5 e) 1 f) 2 g) 3 h) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.05 ppm b) 0.04 ppm c) 0.02 ppm d) 0.23 ppm e) 0.02 ppm f) 0.12 ppm g) 0.02 ppm h) 0.06 ppm Wet wt	8 clutches, significantly different ($P < 0.05$) Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23 87-90

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
197 Eggs		GC	28	0.0-0.25 ppm wet wt	0.03 + or - 0.06 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DEE; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Gull, herring
LARUS ARGENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
198 Eggs		GC	30	0.00-5.10 ppm wet wt	0.19 + or - 0.93 ppm wet wt	Ratcliffe index 1.53-1.98, shell thickness 0.34-0.47 mm, shell wt 5.07-7.49 g, lipid content 6.10-10.20%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DEE; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
199 Adipose	Placental	GC/MS	1	Not applicable	4.5 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DEE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

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Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
50-29-3
C14-H9-Cl5
MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10(E-7) mm Hg at 20 C
Porpoise, harbor
PHOCOENA PHOCOENA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
200 Kidney	Placental	GC/MS	1	Not applicable	4.5 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% Value for fetus (20 cm length) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
201 Liver	Placental	GC/MS	1	Not applicable	5.2 ug/g wet wt	In extractable lipids. Liver lipid content 21% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
202 Eggs		GC-EC	a) 3 b) 3 c) 3 d) 5 e) 1 f) 2 g) 3 h) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 1.0 ppm b) 1.5 ppm c) 0.66 ppm d) 1.5 ppm e) 0.37 ppm f) 2.9 ppm g) 0.37 ppm h) 0.99 ppm Wet wt	8 clutches, significantly different ($P < 0.05$) Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, F.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Eider, common

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
202 Eggs		GC	30	0.33-0.43 ppm wet wt	0.38 + or - 0.13 ppm wet wt	Batcliffe index 1.94-2.38, shell thickness 0.37-0.5 mm, shell wt 7.14-9.99 g, lipid content 15.07-18.02%. Collected 5/77. Maine, Bangs Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; CYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Gannet, Norwegian
MORUS BASSANUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
204 Eggs		GC	a) 10 b) 11	a) 0.59-5.2 ppm b) 0.26-1.2 ppm Wet wt	a) 2.1 + or - 1.5 ppm b) 0.66 + or - 0.27 ppm Wet wt	a) 1972 b) 1978 Significant decrease in 6 yr period ($P<0.01$) No major industries in vicinity of gannetry. Norway, Nordejele BIRDS; GANNETS; DDE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; NORWAY; EGGS	Fimreite, N. Kveseth, N. Brewik, E.M. 1980 Bulletin of Environmental Contamination and Toxicology 24:142-144

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Grebe, western
AECHMOPHORUS OCCIDENTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
205 Adipose		GC	18	5.4-213.0 ppm wet wt	61.5 ppm wet wt	Visceral fat Higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindwall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760

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Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MP 318.02, MP 88.4 C
Grebe, western
AECHMOPHORUS OCCIDENTALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
206 Blood		GC	16	0.04-2.00 ppm wet wt	0.55 ppm wet wt	Higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
207 Eggs		GC	40	1.0-21.4 ppm wet wt (20-275 ppm lipid wt)	6.6 + or - 1.6 ppm wet wt (76.5 + or - 17.7 ppm lipid wt)	Average shell thickness index 1.898 + or - 0.015 mm. 2.3% decrease from pre-DDT use period Collected 1973-74. Utah, Bear River Migratory Bird Refuge No detectable effects on reproduction. EGGS; BIRDS; UTAH; CHLORINE ORGANIC COMPOUNDS; DDE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES	Lindvall, M.L. Low, J.B. 1980 Pesticides Monitoring Journal 14(3):106-111
208 Eggs			40	1.0-21.4 ppm wet wt (20-275 ppm lipid wt)	6.6 ppm wet wt (76.6 ppm lipid wt)	Whole eggs Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760
209 Muscle		GC	24	<0.1-115.2 ppm wet wt (3-3287 ppm lipid wt)	12.6 ppm wet wt (513 ppm lipid wt)	Breast muscle Higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge BIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAH; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; POLYCHLORINATED BIPHENYLS	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
RN 316.02, MP 88.4 C
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
210 Eggs		GC	28	4.0-27.00 ppm wet wt	8.66 + or - 4.67 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
RN 316.02, MP 88.4 C
Gull, herring
LARUS ARGENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
211 Eggs		GC	a) 30 b) 28	a) 0.34-7.50 ppm b) 0.70-4.50 ppm Wet wt	a) 1.94 + or - 1.76 ppm b) 1.93 + or - 0.88 ppm Wet wt	a) Ratcliffe index 1.53-1.98, shell thickness 0.34-0.47 mm, shell wt 5.07-7.49 g, lipid content 6.10-10.20% b) Ratcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.28-7.64 g, lipid content 6.2-9.7% Collected 5/77. Maine, Appledore Island Virginia, Fisherman Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-C14
MW 318.02, MP 88.6 C
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
212 Adipose	Placental	GC/MS	1	Not applicable	9.2 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (20 cm length) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
213 Kidney	Placental	GC/MS	1	Not applicable	7.2 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
214 Liver	Placental	GC/MS	1	Not applicable	11.8 ug/g wet wt	In extractable lipids. Liver lipid content 2% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Ethylene, 1,1-dicaloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Snake, garter
THAMNOPHIS SIRTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
215 Body, whole		GC	6	0.22-0.78 ppm wet wt	0.47 ppm wet wt	Snout-vent length 646-752 mm, lipid content 3.2-9.0% Nestling birds in stomachs of 3 snakes contained 0.22-0.45 ppm. Lake Michigan, Spider Island SNAKES; MARYLAND; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; MERCURY; POLYCHLORINATED BIPHENYLS	Heinz, G.H. Haseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:738-743

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
72-55-9
C14-H8-Cl4
MW 318.02, MP 88.4 C
Snake, water
NERODIA SIPEDON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
216 Body, whole		GC	1	Not applicable	1.6 ppm wet wt	Snout-vent length 855 mm, 6.2% lipid content Lake Michigan, Pilot Island SNAKES; MARYLAND; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; MERCURY; POLYCHLORINATED BIPHENYLS	Heinz, G.H. Haseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:738-743

Fluorine
7782-41-4
F
AtW 18.9984, MP -219.61 C, BP -188.13 C, VP 100 mm Hg at -203 C
Deer, mule
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
217 Bone		NAS	a) 12 b) 6	a) Not given b) Not given	a) < or = 0.3 ppm b) < or = 0.5 ppm Dry wt	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Metacarpus Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182

Fluorine
7782-41-4
F
AtW 18.9984, MP -219.61 C, BP -188.13 C, VP 100 mm Hg at -203 C
Mouse, deer
PEROMYSCUS MANICULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
218 Bone		NAS	a) 45 b) 45 c) 45	a) 31-100 ppm b) 19-120 ppm c) 16-93 ppm Dry wt	a) 51.3 + or - 17.6 ppm b) 56.3 + or - 32.9 ppm c) 38.2 + or - 22.9 ppm Dry wt	a) Pinyon-juniper habitat b) Mountain shrub habitat c) Big sagebrush habitat Captured 6/78 near oil shale tracts before mining initiated Whole skeleton. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; MORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.M. 1980 Journal of Wildlife Diseases 16(2):175-182

Iodine
7553-56-2
I
AtW 126.9045, MP 113.60 C, BP 185.24 C, VP (solid) 0.03 mm Hg at 0 C, 0.305 mm Hg at 25 C, 2.154 mm Hg at 50 C, 26.78 mm Hg at 90 C
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
219 Blood, serum	Ingestion		12	a) Not given b) Not given c) Not given	a) 8.9 ug/100 ml b) 51.2 ug/100 ml c) 276.6 ug/100 ml	a) Control diet b) 50 mg ethylenediamine dihydriodide/day for 4 wk c) 400 mg ethylenediamine dihydriodide/day for 4 wk Yearling Holstein steers, mean age 17 mos, mean wt 410 kg CATTLE; BLOOD SERUM; LIVER; MUSCLES; THYROID GLANDS; KENTUCKY; IODINE; BIOACCUMULATION	Downer, J.V. Hemken, R.W. Fox, J.D. Bull, L.S. 1981 Journal of Animal Science 52(2):413-417
220 Liver	Ingestion		12	a) Not given b) Not given c) Not given	a) 0.093 ug/g b) 0.121 ug/g c) 0.781 ug/g Wet wt	a) Control diet b) 50 mg ethylenediamine dihydriodide/day for 4 wk c) 400 mg ethylenediamine dihydriodide/day for 4 wk Yearling Holstein steers, mean age 17 mos, mean wt 410 kg CATTLE; BLOOD SERUM; LIVER; MUSCLES; THYROID GLANDS; KENTUCKY; IODINE; BIOACCUMULATION	Downer, J.V. Hemken, R.W. Fox, J.D. Bull, L.S. 1981 Journal of Animal Science 52(2):413-417
221 Muscle	Ingestion		12	a) Not given b) Not given c) Not given	a) 0.091 ug/g b) 0.127 ug/g c) 0.406 ug/g Wet wt	a) Control diet b) 50 mg ethylenediamine dihydriodide/day for 4 wk c) 400 mg ethylenediamine dihydriodide/day for 4 wk. Significantly higher levels in biceps brachii and trapezius than in semimembranosus, longissimus and psoas major Yearling Holstein steers, mean age 17 mos, mean wt 410 kg CATTLE; BLOOD SERUM; LIVER; MUSCLES; THYROID GLANDS; KENTUCKY; IODINE; BIOACCUMULATION	Downer, J.V. Hemken, R.W. Fox, J.D. Bull, L.S. 1981 Journal of Animal Science 52(2):413-417

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Iodine
7553-56-2
I
AtW 126.9045, MP 113.60 C, BP 185.24 C, VP (solid) 0.03 mm Hg at 0 C, 0.305 mm Hg at 25 C, 2.154 mm Hg at 50 C, 26.76 mm Hg at 90 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
222 Thyroid gland	Ingestion		12	a) Not given b) Not given c) Not given	a) 437 ug/g b) 441 ug/g c) 567 ug/g Wet wt	a) Control diet b) 50 mg ethylenediamine dihydriodide/day for 8 wk c) 400 mg ethylenediamine dihydriodide/day for 8 wk Yearling Holstein steers, mean age 17 mos, mean wt 410 kg CATTLE; BLOOD SERUM; LIVER; MUSCLES; THYROID GLANDS; KENTUCKY; IODINE; BIOACCUMULATION	Downer, J.V. Henken, E.W. Fox, J.D. Bull, L.S. 1981 Journal of Animal Science 52(2):413-417

Iron
7439-89-6
Fe
AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C
Oyster
CRASSOSTREA VIRGINICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
223 Body, whole				a) 24.8-69.9 ug/g b) 16.2-29.8 ug/g c) 14.7-137.0 ug/g d) 17.1-99.5 ug/g e) 11.5-90.1 ug/g f) 12.0-65.8 ug/g g) 10.4-20.5 ug/g h) Not given i) Not given j) Not given k) 27.7-170.6 ug/g l) Not given Dry wt	a) 49.2 + or - 18.7 ug/g b) 22.4 + or - 6.8 ug/g c) 48.2 + or - 28.8 ug/g d) 48.7 + or - 32.2 ug/g e) 42.7 + or - 22.8 ug/g f) 41.3 + or - 26.9 ug/g g) 15.7 + or - 5.5 ug/g h) 20.8 + or - 0.6 ug/g i) 36.3 + or - 18.8 ug/g j) 83.3 + or - 2.8 ug/g k) 104.2 + or - 65.5 ug/g l) 38.5 + or - 1.9 ug/g Dry wt	a) Wando River, mouth, 6 samples b) Wando River, mile 4, 4 samples c) Wando River, mile 6, 30 samples d) Wando River, mile 10, 7 samples e) Charleston Harbor, 8 samples f) North Santee Bay, 5 samples g) South Santee, 3 samples h) Fishing Creek, 2 samples i) Cape Romain, 2 samples j) St. Helena Sound, 2 samples k) Ashley River, 4 samples l) Bulls Bay, 2 samples 2 or more oysters/sample. Mean sample wt 12.26 g. South Carolina, coast OYSTERS; SOUTH CAROLINA; BODY; COPPER; IRON; BIOACCUMULATION; WATER POLLUTION	Mathews, T.D. Boyne, J.V. Davis, R.A. Simmons, D.R. 1979 Journal of Environmental Science and Health A14(8):683-694

Iron
7439-89-6
Fe
AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C
Swan, mute
CYGNUS OLOR

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
224 Kidney	Ingestion	AAS	a) 17 b) 9	a) 470-2100 ug/g b) 940-1500 ug/g Dry wt	a) 1130 ug/g b) 1245 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kindgom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
225 Liver	Ingestion	AAS	a) 17 b) 9	a) 7000-23000 ug/g b) 1000-5900 ug/g Dry wt	a) 10480 ug/g b) 2425 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kindgom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Antelope, pronghorn
ANTILOCAPRA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
226 Kidney		AAS	19	Not given	0.8 + or - 0.6 ug/g Dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

(NEXT PAGE)

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Antelope, pronghorn
ANTILOCAPRA AMERICANA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
227 Liver		AAS	10	Not given	0.6 + or - 0.5 ug/g dry wt	Ages < 10-85 mo, assumed to be healthy. Accumulation with age (P=0.005). Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains AGE; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Bat, big brown
EPTESICUS FUSCUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
229 Body, whole		AAS	a) 9 b) 10	a) 20-90 ppm b) 20-56 ppm Wet wt	a) 46.55 ppm b) 31.49 ppm Wet wt Geometric means	a) Males b) Females Gastrointestinal tract and large embryos removed before analysis Significantly higher levels in males Trapped 5/76 in Montpellier Barn, 0.61 km NW of Baltimore-Washington Parkway. Maryland, Prince Georges County, Laurel VOLES; MICE; SHREWS; RODENTS; BATS; MARYLAND; ADULTS; FETUS; BODY; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.R., Jr. 1979 Environmental Science and Technology 13(3):338-341
229 Fetal		AAS		Not given	0.1b ppm wet wt	Average value for 9 litters 1.5-3 wk before completion of embryonic development. Mothers trapped 5/76 in Montpellier Barn, 0.61 km NW of Baltimore-Washington Parkway. Maryland, Prince Georges County, Laurel VOLES; MICE; SHREWS; RODENTS; BATS; MARYLAND; ADULTS; FETUS; BODY; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.R., Jr. 1979 Environmental Science and Technology 13(3):338-341

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Bat, little brown
MYOTIS LUCIFUGUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
230 Body, whole		AAS	12	11-29 ppm wet wt	16.97 ppm wet wt Geometric mean	Gastrointestinal tract and large embryos removed before analysis Trapped 5/76 in Montpellier Farm, 0.61 km NW of Baltimore-Washington Parkway. Maryland, Prince Georges County, Laurel VCLES; MICE; SHREWS; RODENTS; BATS; MARYLAND; ADULTS; FETUS; BODY; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.R., Jr. 1979 Environmental Science and Technology 13(3):330-341
231 Fetal		AAS		Not given	2.38 ppm wet wt	Average value for 5 litters 1.5-3 wk before completion of embryonic development Mothers trapped 5/76 in Montpellier Farm, 0.61 km NW of Baltimore-Washington Parkway. Maryland, Prince Georges County, Laurel VCLES; MICE; SHREWS; RODENTS; BATS; MARYLAND; ADULTS; FETUS; BODY; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.R., Jr. 1979 Environmental Science and Technology 13(3):330-341

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Bluegill
LEPOMIS MACROCHIRUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
232 Body, whole		AAS	61	Not given	2.6 ug/g	Fishes, mean length 95 mm, mean dry wt 16.40 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vimikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Bullhead, black
ICTALURUS MELAS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
233 Body, whole		AAS	10	Not given	1.1 ug/g	Fishes, mean length 172 mm, mean dry wt 81.59 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
234 Blood	Ingestion	AAS	20	a) 0.093-0.285 ppm b) < 0.03-0.084 ppm c) 0.086-0.294 ppm d) Not applicable	a) 0.221 ppm b) < 0.03 ppm c) 0.200 ppm d) < 0.03 ppm	a) Pastures fertilized with treated raffinate, pre-test b) Pastures fertilized with treated raffinate, post-test c) Controls, pre-test d) Controls, post-test Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
235 Blood, whole	Ingestion	AAS	a) 27 b) 10 c) 1 d) 1	a) 0.2 ppm or less b) 0.3-0.4 ppm c) Not applicable d) Not applicable	a) Not given b) Not given c) 0.3 ppm d) 0.8 ppm	a) Adults b) Adults c) Orphaned calf d) Orphaned calf Clinically normal cattle fed sugar beet screenings from refinery which contained Pt acetate impregnated filter papers. Blindness, incoordination, muscle twitching, excitement, prostration, coma. Edema of cerebral cortex, petechiae in the leptomeninges, fibrous adhesions of pleural surfaces, pneumonia. CATTLE; JUVENILES; COLORADO; ADULTS; AUTOPSIES; LEAD POISONING; NEUROMUSCULAR DISEASES; BLOOD; KIDNEYS; LIVER; BIOACCUMULATION; LEAD ORGANIC COMPOUNDS	Hamar, D.W. Gerlach, H.L. McChesney, A.E. Aufderheide, W.M. 1980 Bovine Practice 1(5):49-50

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
ECS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
236 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 5.0 + or - 0.2 ppm b) 7.2 + or - 0.6 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < .05) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
237 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) 0.24 + or - 0.27 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < .01) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
238 Kidney		AAS	190	Not detected - 2.29 ppm wet wt	0.22 + or - 0.29 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Planjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
239 Kidney	Ingestion	AAS	1	a) Not applicable b) Not applicable	a) 60 ppm b) 240 ppm Wet wt	a) Medulla b) Cortex Hereford calf fed sugar beet screenings from refinery which contained Pb acetate impregnated filter papers. Blindness, incoordination, muscle twitching, excitement, prostration, coma. Edema of cerebral cortex, petechiae in the leptomeninges, fibrous adhesions of pleural surfaces, pneumonia. CATTLE; JUVENILES; COLORADO; ADULTS; AUTOPSIES; LEAD POISONING; NEUROMUSCULAR DISEASES; BLOOD; KIDNEYS; LIVER; BIOACCUMULATION; LEAD ORGANIC COMPOUNDS	Hamar, D.W. Gerlach, H.L. McChesney, A.E. Aufderheide, W.H. 1980 Bovine Practice 1(5):49-50

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
240 Kidney	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.95 + or - 0.09 ppm b) 10.8 + or - 0.9 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase ($P < .01$) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
241 Kidney			a) 35 b) Not given	a) 0.4-6.8 mg/kg wet wt b) Not given	a) 1.20 mg/kg b) 0.34 mg/kg Wet wt Medians	a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from previous publication) 2 yr olds Germany, Eifel area CATTLE; LEAD 210; POLONIUM 210; GERMANY; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; LEAD; BIOACCUMULATION; MINING; RADIONUCLIDES	Bunzl, K. Kracke, W. 1980 Food and Cosmetics Toxicology 18:133-137
242 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.23 ppm b) 0.50 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
243 Liver		AAS	190	0.05-0.85 ppm wet wt	0.14 + or - 0.15 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, M.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
244 Liver	Ingestion	AAS	1	Not applicable	30 ppm wet wt	Hereford calf fed sugar beet screenings from refinery which contained lead acetate impregnated filter papers. Blindness, incoordination, muscle twitching, excitement, prostration, coma. Edema of cerebral cortex, petechiae in the leptomeninges, fibrous adhesions of pleural surfaces, pneumonia. CATTLE; JUVENILES; COLORADO; ADULTS; AUTOPSIES; LEAD POISONING; NEUROMUSCULAR DISEASES; BLOOD; KIDNEYS; LIVER; BIOACCUMULATION; LEAD ORGANIC COMPOUNDS	Hamar, D.W. Gerlach, M.L. McChesney, A.E. Aufderheide, W.M. 1980 Bovine Practice 1(5):49-50
245 Liver	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.31 + or - 0.02 ppm b) 4.33 + or - 0.53 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase ($P < .01$) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
246 Liver			a) 35 b) Not given	a) 0.2-6.2 mg/kg wet wt b) Not given	a) 0.58 mg/kg b) 0.12 mg/kg Wet wt Medians	a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from previous publication) 2 yr olds Germany, Eifel area CATTLE; LEAD 210; POLONIUM 210; GERMANY; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; LEAD; BIOACCUMULATION; MINING; RADIONUCLIDES	Bunzl, K. Kracke, W. 1980 Food and Cosmetics Toxicology 18:133-137
247 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.065 ppm b) 0.58 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; CHIANOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
248 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.10 + or - 0.03 ppm b) 0.23 + or - 0.05 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
249 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) < 0.01 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
250 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) < 0.02 ppm b) 0.12 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
251 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.21 + or - 0.01 ppm b) 3.77 + or - 1.1 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < .05) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

Lead
7439-92-1
Pt
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Crappie, black
POMOXIS NIGROMACULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
252 Body, whole		AAS	26	Not given	1.3 ug/g	Fishes, mean length 189 mm, mean dry wt 78.09 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Lead
7439-92-1
Pt
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Deer, mule
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
253 Kidney		AAS	21	Not given	0.7 + or - 0.4 ug/g dry wt	Ages < 10-85 mo, assumed to be healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
254 Liver		AAS	27	Not given	0.9 + or - 0.7 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Fish

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
255 Kidney		AAS	17	0.10-0.42 ug/g wet wt	0.19 ug/g wet wt	Composite samples of MUGILIDAE, CYPRINIDAE, MULLIDAE, SPARIDAE, SCOMBRIDAE, TRIGLIDAE, PLEURONECTIDAE, ANGUILLIDAE, and GOBIIDAE (marketed as "mixed fried fish") Maximum length 10 cm Italy, Tuscan coasts LEAD; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY	Buggiani, S.S. Vannucchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25:90-92
256 Liver		AAS	17	0.10-0.41 ug/g wet wt	0.18 ug/g wet wt	Composite samples of MUGILIDAE, CYPRINIDAE, MULLIDAE, SPARIDAE, SCOMBRIDAE, TRIGLIDAE, PLEURONECTIDAE, ANGUILLIDAE, and GOBIIDAE (marketed as "mixed fried fish") Maximum length 10 cm Italy, Tuscan coasts LEAD; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY	Buggiani, S.S. Vannucchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25:90-92
257 Muscle		AAS	15	0.10-0.52 ug/g wet wt	0.23 ug/g wet wt	Composite samples of MUGILIDAE, CYPRINIDAE, MULLIDAE, SPARIDAE, SCOMBRIDAE, TRIGLIDAE, PLEURONECTIDAE, ANGUILLIDAE, and GOBIIDAE (marketed as "mixed fried fish") Maximum length 10 cm Italy, Tuscan coasts LEAD; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY	Buggiani, S.S. Vannucchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25:90-92

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Grouse, ruffed
BONASSA UMBELLUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
258 Feathers		AAS	130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 7.5 + or - 2.7 ug/g b) 4.8 + or - 2.7 ug/g c) 8.7 + or - 2.8 ug/g d) 1.5 + or - 0.5 ug/g e) 5.2 + or - 2.3 ug/g f) 8.3 + or - 3.5 ug/g Dry wt	a) 77 adults b) 53 juveniles c) 88 males d) 42 females e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest Wing and tail feathers Birds shot by hunters in remote forest area. Virginia (SW) BIRDS; FEATHERS; JUVENILES; CADMIUM; COPPER; LEAD; NICKEL; SILVER; ZINC; VIRGINIA; ADULTS	Scanlon, P.F. Oderwald, R.G. Dietrick, T.J. Coggin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25:947-949

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Mouse, white-footed
PEROMYSCUS LEUCOPUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
259 Body, whole		AAS	a) 5 b) 14	a) 0.32-13 ppm b) 0.3e-41 ppm Wet wt	a) 1.16 ppm b) 4.91 ppm Wet wt Geometric means	a) Montpellier Barn, 0.61 km NW of Baltimore-Washington Parkway b) Baltimore-Washington Parkway Gastrointestinal tract and large embryos removed before analysis Trapped 5-6/76. Maryland, Prince Georges County, Laurel VOLES; MICE; SHREWS; RODENTS; BATS; MARYLAND; ADULTS; FETUS; BODY; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.R., Jr. 1979 Environmental Science and Technology 13(3):338-341
260 Fetal				Not given	0.11 ppm wet wt	Litter from mother trapped near Baltimore-Washington Parkway 5-6/76. Maryland, Prince Georges County, Laurel VOLES; MICE; SHREWS; RODENTS; BATS; MARYLAND; ADULTS; FETUS; BODY; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.R., Jr. 1979 Environmental Science and Technology 13(3):338-341

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Perch, yellow
PERCA FLAVESCENS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
261 Body, whole		AAS	40	Not given	2.2 ug/g	Fishes, mean length 104 mm, mean dry wt 11.22 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Shrew, short-tailed
SIBERIA BREVICAUDA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
262 Body, whole		AAS	a) 4 b) 6	a) 0.23-8.0 ppm b) 6.2-130 ppm Wet wt	a) 1.85 ppm b) 26.20 ppm Wet wt Geometric means	a) Montpellier Farm, 0.61 km NW of Baltimore-Washington Parkway b) Baltimore-Washington Parkway Gastrointestinal tract and large embryos removed before analysis. Trapped 5-6/76. Maryland, Prince Georges County, Laurel VOLES; MICE; SHREWS; RODENTS; BATS; MARYLAND; ADULTS; FETUS; BODY; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.R., Jr. 1979 Environmental Science and Technology 13(3):338-341

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Swan, mute
CYGNUS OLOR

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
263 Adrenal gland	Ingestion	AAS	2	16-29 ug/g dry wt	23 ug/g dry wt	Poisoned swans, dead or dying, in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. United Kingdom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
264 Blood	Ingestion	AAS	a) 25 b) 29	a) Not detected-3290 ug/100 ml b) 3-132 ug/100 ml	a) 375 ug/100 ml b) 21.9 ug/100 ml	a) Affected herd in heavily fished area, Nottingham b) Normal herd, Burton-on-Trent United Kingdom, River Trent Changes in erythrocytes, reduction of cell volume and hemoglobin concentration. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Swan, mute
CYGNUS OLOR

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
265 Bone	Ingestion	AAS	a) 4 b) 2	a) 212-1255 ug/g b) 21-41 ug/g Dry wt	a) 762 ug/g b) 32 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kingdom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
266 Brain	Ingestion	AAS	a) 5 b) 1	a) 26-150 ug/g b) Not given Dry wt	a) 65 ug/g b) 59 ug/g	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kingdom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
267 Kidney	Ingestion	AAS	a) 18 b) 16	a) 350-6550 ug/g b) 1-77 ug/g Dry wt	a) 1734 ug/g b) 16 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kingdom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202

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Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Swan, mute
CYGNUS OLOR

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
268 Liver	Ingestion	AAS	a) 18 b) 11	a) 51-206 ug/g b) 1-11 ug/g Dry wt	a) 117 ug/g b) 3.5 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kindgce, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; PCNES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
269 Spleen	Ingestion	AAS	a) 12 b) 8	a) 27-117 ug/g b) 5-21 ug/g Dry wt	a) 67 ug/g b) 8.7 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kindgce, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDON; LEAD POISONING; PCNES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
270 Blood	Ingestion		1	Not applicable	0.025 ppm wet wt	From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO4 as growth promotant. Estimated death losses, 400 of 2000 pigs during 10.5 mo. Georgia (H) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, melena, weakness, pallor. Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, pale muscles, watery blood, reddened bone marrow, splenic myeloid metaplasia. SWINE; GEORGIA; METAL POISONING; BLOOD; BLOOD PLASMA; FECES; KIDNEYS; LIVER; ARSENIC; COPPER; LEAD; BIOACCUMULATION; FOOD ADDITIVES	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, A.V. Swalley, R.E. 1979 Journal of the American Veterinary Medical Association 174(6):616-619
271 Kidney	Ingestion		2	0.5-5.0 ppm wet wt	2.8 ppm wet wt	From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO4 as growth promotant. Estimated death losses, 400 of 2000 pigs during 10.5 mo. Georgia (H) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, melena, weakness, pallor. Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, pale muscles, watery blood, reddened bone marrow, splenic myeloid metaplasia. SWINE; GEORGIA; METAL POISONING; BLOOD; BLOOD PLASMA; FECES; KIDNEYS; LIVER; ARSENIC; COPPER; LEAD; BIOACCUMULATION; FOOD ADDITIVES	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, A.V. Swalley, R.E. 1979 Journal of the American Veterinary Medical Association 174(6):616-619
272 Liver	Ingestion		1	Not applicable	0.5 ppm wet wt	From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO4 as growth promotant. Estimated death losses, 400 of 2000 pigs during 10.5 mo. Georgia (H) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, melena, weakness, pallor. Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, pale muscles, watery blood, reddened bone marrow, splenic myeloid metaplasia. SWINE; GEORGIA; METAL POISONING; BLOOD; BLOOD PLASMA; FECES; KIDNEYS; LIVER; ARSENIC; COPPER; LEAD; BIOACCUMULATION; FOOD ADDITIVES	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, A.V. Swalley, R.E. 1979 Journal of the American Veterinary Medical Association 174(6):616-619

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Vole, meadow
MICROTUS PENNSYLVANICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
273 Body, whole		AAS	a) 6 b) 20	a) 0.46-1.4 ppm b) 0.22-5.0 ppm Wet wt	a) 0.84 ppm b) 1.45 ppm Wet wt Geometric means	a) Montpellier Farm, 0.61 km NW of Baltimore-Washington Parkway b) Baltimore-Washington Parkway Gastrointestinal tract and large embryos removed before analysis Trapped 5-6/76. Maryland, Prince Georges County, Laurel VOLES; MICE; SHREWS; RODENTS; BATS; MARYLAND; ADULTS; FETUS; BODY; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.R., Jr. 1979 Environmental Science and Technology 13(3):338-341
274 Fetal		AAS		a) Not given b) Not given	a) 0.11 ppm b) 0.17 ppm Wet wt	a) Litter of mothers trapped in Montpellier Farm, 0.61 km NW of Baltimore-Washington Parkway b) Litter of mothers trapped near Baltimore-Washington Parkway 5-6/76. Maryland, Prince Georges County, Laurel VOLES; MICE; SHREWS; RODENTS; BATS; MARYLAND; ADULTS; FETUS; BODY; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.R., Jr. 1979 Environmental Science and Technology 13(3):338-341

Lead
7439-92-1
Pb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Vulture, king
SARCORHAMPUS PAPA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
275 Kidney	Ingestion	AAS	a) 1 b) 1	a) Not given b) Not given	a) 70.6 ppm b) 24.6 ppm Wet wt	a) Had 13 lead shot in stomach b) Had 3 lead shot in stomach Adult birds at a zoo. Ataxia, anorexia. Distended gall bladder, hemosiderosis, biliary pigment in tubular epithelium of kidneys. WISCONSIN; AUTOPSIES; LEAD POISONING; KIDNEYS; LIVER; LEAD; BIOACCUMULATION; BIRDS	Decker, R.A. McDonald, A.M. Prideaux, J.W. 1979 Journal of the American Veterinary Medical Association 175:1009
276 Liver	Ingestion	AAS	a) 1 b) 1	a) Not given b) Not given	a) 62.8 ppm b) 6.8 ppm Wet wt	a) Had 13 lead shot in stomach b) Had 3 lead shot in stomach Adult birds at a zoo. Ataxia, anorexia. Distended gall bladder, hemosiderosis, biliary pigment in tubular epithelium of kidneys. WISCONSIN; AUTOPSIES; LEAD POISONING; KIDNEYS; LIVER; LEAD; BIOACCUMULATION; BIRDS	Decker, R.A. McDonald, A.M. Prideaux, J.W. 1979 Journal of the American Veterinary Medical Association 175:1009

Lead, isotope of mass 210
14255-04-0
Pb
PB 210
Cattle
BOS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
277 Kidney			a) 35 b) Not given	a) 8.4-42 pCi/kg wet wt b) Not given	a) 19.5 pCi/kg b) 44.0 pCi/kg Wet wt Medians	a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from previous publication) Significantly lower values in animals near lead mine 2 yr olds Germany, Eifel area CATTLE; LEAD 210; POLONIUM 210; GERMANY; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; LEAD; BIOACCUMULATION; MINING; RADIONUCLIDES	Bunzl, K. Kracke, W. 1980 Food and Cosmetics Toxicology 18:133-137
278 Liver			a) 35 b) Not given	a) 4.0-67.5 pCi/kg wet wt b) Not given	a) 12.9 p/Ci/kg b) 18.0 pCi/kg Wet wt Medians	a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from previous publication) Significantly lower values in animals near lead mine 2 yr olds Germany, Eifel area CATTLE; LEAD 210; POLONIUM 210; GERMANY; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; LEAD; BIOACCUMULATION; MINING; RADIONUCLIDES	Bunzl, K. Kracke, W. 1980 Food and Cosmetics Toxicology 18:133-137

Manganese
7439-96-5
Mn
AtW 54.9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Antelope, pronghorn
ANTILOCAPRA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
279 Kidney		AAS	21	Not given	6.0 + or - 1.4 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
28[illegible]		AAS	20	Not given	7.3 + or - 3.2 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Manganese
7439-96-5
Mn
AtW 54.9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Cattle
BOS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
281 Kidney		AAS	190	0.58-1.67 ppm wet wt	1.07 + or - 0.22 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
282 Liver		AAS	190	1.11-4.09 ppm wet wt	2.72 + or - 0.55 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

Manganese
7439-96-5
Mn
AtW 54.9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Deer, mule
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
283 Kidney		AAS	23	Not given	8.2 + or - 2.2 ug/g dry wt	Ages < 10-85 mo Animals assumed to be healthy Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
284 Liver		AAS	29	Not given	9.4 + or - 2.5 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Bass, largemouth
MICROPTERUS SALOIDES

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
285 Muscle		AAS	a) 3 b) 11 c) 4	a) 0.14-0.31 ppm b) 0.11-0.81 ppm c) 0.49-1.20 ppm	a) 0.27 ppm b) 0.49 ppm c) 0.67 ppm	(a) Length 15-25 cm (b) Length 25-35 cm (c) Length 35-60 cm Reservoir constructed in early '70's. Primary source is natural soil Hg. Expected decrease in soil levels within 5 yr. Illinois (S), Jackson and Union Counties, Cedar Lake Reservoir MUSCLES; ILLINOIS; MERCURY; MERCURY ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION	Cox, J.A. Carnahan, J. DiNunzio, J. McCoy, J. Meister, J. 1979 Bulletin of Environmental Contamination and Toxicology 23:779-783

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Beaver
CASTOR CANADENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
286 Intestine		AAS	4	Not given	31 + or - 3 ppb	Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
287 Kidney		AAS	4	Not given	33 + or - 5 ppb	Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
288 Liver		AAS	4	Not given	32 + or - 8 ppb	Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105

(NEXT PAGE)

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Beaver
CASTOR CANADENSIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
289 Muscle		AAS	4	Not given	32 + or - 6 ppb	Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Bluegill
LEPOMIS MACROCHIRUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
290 Muscle		AAS		Not given	<0.2 ppm	Reservoir constructed in early '70's. Primary source is natural soil Hg. Expected decrease in soil levels within 5 yr. Illinois (S), Jackson and Union Counties, Cedar Lake Reservoir MUSCLES; ILLINOIS; MERCURY; MERCURY ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION	Cox, J.A. Carnahan, J. DiNunzio, J. McCoy, J. Meister, J. 1979 Bulletin of Environmental Contamination and Toxicology 23:779-783

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Booby, Peruvian
SULA VARIEGATA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
291 Feathers			8	Not given	0.72 + or - 0.35 ug/g dry wt	Breast feathers Live or dead birds collected on beaches near Lima, 1972 Humboldt Current, Peru BIRDS; FEATHERS; PERU; BIOACCUMULATION; WATER POLLUTION; MERCURY	Gochfield, M. 1980 Environmental Pollution 22:197-205

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm .1 at 25 C, 100 mm Hg at 260 C
Cattle
BCS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
292 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.013 ppm b) < 0.01 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
293 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) < 0.01 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
294 Kidney		AAS	190	Not detected-0.177 ppm wet wt	0.006 + or - 0.016 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
295 Kidney	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 0.09 + or - 0.01 ppm b) 2.04 + or - 0.16 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < .01) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
296 Liver		AAS	190	< 0.004-0.050 ppm wet wt	0.005 + or - 0.005 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

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Mercury
7439-97-6
Hg
AW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
297 Liver	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) < 0.01 ppm b) 0.27 + or - 0.3 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < .01) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
298 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) 0.05 + or - 0.01 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < .01) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
299 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) 0.02 + or - 0.003 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < .05) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
300 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) 0.08 + or - 0.02 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase (P < .05) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Chicken

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
301 Eggs	Ingestion	GC	2	a) Not applicable b) 2600-4500 ng/g	a) 310 ng/g b) 3550 ng/g	a) White, 5% of total Hg b) Yolk, 87.2% of total Hg Total levels 100-1000X higher than in market eggs From domestic chickens accidentally fed fungicide-contaminated grain. CHICKENS; EGGS; NEW YORK; FUNGICIDES; MERCURY INORGANIC COMPOUNDS; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION	Cappon, C.J. Smith, J.C. 1981a Bulletin of Environmental Contamination and Toxicology 26:472-476

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cormorant, Guanay
PHALACROCORAX BOUGAINVILLII

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
302 Feathers			4	Not given	0.43 + or - 0.10 ug/g dry wt	Breast feathers Live or dead birds collected on beaches near Lima, 1972 Humboldt Current, Peru BIRDS; FEATHERS; PERU; BIOACCUMULATION; WATER POLLUTION; MERCURY	Gochfield, M. 1980 Environmental Pollution 22:197-205

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cormorant, red-legged
PHALACROCORAX GAIMARDII

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
303 Feathers			2	Not given	1.04 + or - 0.65 ug/g dry wt	Breast feathers Live or dead birds collected on beaches near Lima, 1972 Humboldt Current, Peru BIRDS; FEATHERS; PERU; BIOACCUMULATION; WATER POLLUTION; MERCURY	Gochfield, M. 1980 Environmental Pollution 22:197-205

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Crappie
POMOXIS ANNULARIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
304 Muscle		AAS	15	Not given	0.59 ppm	Reservoir constructed in early '70's. Primary source is natural soil Hg. Expected decrease in soil levels within 5 yr. Illinois (S), Jackson and Union Counties, Cedar Lake Reservoir MUSCLES; ILLINOIS; MERCURY; MERCURY ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION	Cox, J.A. Carnahan, J. DiNunzio, J. McCoy, J. Meister, J. 1979 Bulletin of Environmental Contamination and Toxicology 23:779-783

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Deer, whitetail

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
305 Heart		GC	1	Not applicable	60.5 ppb wet wt (56.3% of total Hg)	Rural area. No known contamination source. New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
306 Liver		GC	1	Not applicable	86.4 ppb wet wt (66.4% of total Hg)	Rural area. No known contamination source. New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
307 Muscle		GC	1	Not applicable	72.2 ppb wet wt (79.4% of total Hg)	Rural area. No known contamination source. New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Fish

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
308 Kidney		AAS	17	0.01-5.43 ug/g wet wt	0.76 ug/g wet wt	Composite samples of MUGILIDAE, CYPRINIDAE, MULLIDAE, SPARIDAE, SCOMBERIDAE, TRIGLIDAE, PLEURONECTIDAE, ANGUILLIDAE, and GOBIIDAE (marketed as "mixed fried fish") Maximum length 10 cm Italy, Tuscan coasts LEAD; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY	Buggiani, S.S. Vannucchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25:90-92
309 Liver		AAS	17	0.01-1.21 ug/g wet wt	0.41 ug/g wet wt	Composite samples of MUGILIDAE, CYPRINIDAE, MULLIDAE, SPARIDAE, SCOMBERIDAE, TRIGLIDAE, PLEURONECTIDAE, ANGUILLIDAE, and GOBIIDAE (marketed as "mixed fried fish") Maximum length 10 cm Italy, Tuscan coasts LEAD; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY	Buggiani, S.S. Vannucchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25:90-92
310 Muscle		AAS	10	0.07-0.56 mg/kg	0.17 mg/kg	Random samples. Acceptable limit in most countries = 0.5 mg/kg Persian Gulf IRAN; MUSCLES; FISHES; WATER POLLUTION; MERCURY	Parvaneh, V. 1979 Bulletin of Environmental Contamination and Toxicology 23:357-359
311 Muscle		AAS	8	0.08-0.20 mg/kg	0.14 mg/kg	Random samples. Acceptable limit in most countries = 0.5 mg/kg Persian Gulf IRAN; MUSCLES; FISHES; WATER POLLUTION; MERCURY	Parvaneh, V. 1979 Bulletin of Environmental Contamination and Toxicology 23:357-359
312 Muscle		AAS	8	0.08-0.48 mg/kg	0.19 mg/kg	Random samples. Acceptable limit in most countries = 0.5 mg/kg Persian Gulf IRAN; MUSCLES; FISHES; WATER POLLUTION; MERCURY	Parvaneh, V. 1979 Bulletin of Environmental Contamination and Toxicology 23:357-359
313 Muscle		AAS	5	0.04-0.30 mg/kg	0.15 mg/kg	Random samples. Acceptable limit in most countries = 0.5 mg/kg Persian Gulf IRAN; MUSCLES; FISHES; WATER POLLUTION; MERCURY	Parvaneh, V. 1979 Bulletin of Environmental Contamination and Toxicology 23:357-359

(NEXT PAGE)

Mercury
7439-97-6
Hg
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Fish

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
316 Muscle		AAS	15	0.01-0.70 ug/g wet wt	0.30 ug/g wet wt	Composite samples of MUGILIDAE, CEPLEIDAE, MULLIDAE, SPARIDAE, SCOMBERIDAE, TRIGLIDAE, PLEURONECTIDAE, ANGUILLIDAE, and GOBIIDAE (marketed as "mixed fried fish") Maximum length 10 cm Italy, Tuscan coasts LEAD; MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY	Buggiani, S.S. Vannucchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25:90-92

Mercury
7439-97-6
Hg
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Gannet, Norwegian
MORUS BASSANUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
315 Eggs		AAS	a) 10 b) 11	a) 0.65-0.80 ppm b) 0.66-0.94 ppm Wet wt	a) 0.58 + or - 0.12 ppm b) 0.80 + or - 0.09 ppm Wet wt	a) 1972, mainly as methyl-Hg b) 1978 No major industries in vicinity of gannetry. Norway, Nordsjoe BIRDS; GANNETS; DDE; MERCURY; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; NORWAY; EGGS	Fimreite, N. Kveseth, N. Previk, E.H. 1980 Bulletin of Environmental Contamination and Toxicology 24:142-144

Mercury
7439-97-6
Hg
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Mink
MUSTELA VISON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
316 Muscle	Ingestion	NA	a) 12 b) 11	a) Not given b) Not given	a) 210 + or - 15 mg/g b) 250 + or - 20 mg/g	a) Controls on standard feed containing 0.05 ppm PCB b) Animals fed daily doses of 3300 ug (11 ppm) PCB for 66 days Animals killed 1 wk after parturition, age 1 yr MINK; CADMIUM; MERCURY; POLYCHLORINATED BIPHENYLS; SWEDEN; ADIPOSE TISSUE; KIDNEYS; MUSCLES; BIOACCUMULATION	Olsson, M. Kihlstrom, J.E. Jensen, S. Orberg, J. 1979 Ambio 8(1):25

Mercury
7439-97-6
Hg
Atm 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Otter
LUTRA CANADENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
317 Intestine		AAS	4	Not given	419 + or - 158 ppb	Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
318 Kidney		AAS	4	Not given	1046 + or - 276 ppb	Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
319 Liver		AAS	4	Not given	2973 + or - 2230 ppb	Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
320 Muscle		AAS	4	Not given	989 + or - 217 ppb	Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Pike, northern
ESOX LUCIUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
321 Muscle		AAS	a) 19 b) 18	a) 0.01-0.03 mg/kg b) 0.17-1.38 mg/kg Wet wt	a) 0.02 mg/kg b) 0.62 mg/kg Wet wt	a) Lake Dufault. Length 52.0-81.5 cm, wt 750-2840 g. Levels not related to size b) Lake Duparquet. Length 40.0-81.5 cm, wt 215-3359 g. Levels directly related to size Collected summer '77. Canada, Quebec (NW), Lake Dufault Canada, Quebec (NW), Lake Duparquet CANADA; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; SELENIUS	Speyer, M.R. 1980 Bulletin of Environmental Contamination and Toxicology 24:427-432

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2E10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Raccoon
PROCYN LOTOR

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
322 Kidney		AAS	4	Not given	1113 + or - 308 ppb	Wt 50 + or 0.86 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
323 Liver		AAS	4	Not given	3528 + or - 3388 ppb	Wt 50 + or - 0.86 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
324 Muscle		AAS	4	Not given	278 + or - 73 ppb	Wt 50 + or - 0.86 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105

Mercury
7439-97-6
Hg
AtW 200.59, 5:90-98 MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Seal

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
325 Liver		GC	1	Not applicable	4777.0 ppb wet wt	90.9% of total Hg Canada, Quebec (N), Inuit Eskimo Community DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
326 Muscle		GC	1	Not applicable	425.7 ppb wet wt	37.1% of total Hg Canada, Quebec (N), Inuit Eskimo Community DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Shearwater, sooty
PUFFINUS GRISEUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
327 Feathers			a) 14 b) 1 c) 1	a) Not given b) 0.17-0.88 ug/g c) 0.23-0.96 ug/g Dry wt	a) 0.72 + or - 0.35 ug/g b) 0.36 ug/g c) 0.5a ug/g Dry wt	a) Breast feathers b) Sequential primary wing feathers 1-7 c) Sequential primary wing feathers 1-7 Live or dead birds collected on beaches near Lima, 1972 Humboldt Current, Peru BIRDS; FEATHERS; PERU; BIOACCUMULATION; WATER POLLUTION; MERCURY	Gochfield, M. 1980 Environmental Pollution 22:197-205

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Shrimp, freshwater
MACROBRACHIUM LANCHESTERI

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
328 Body, whole		NA AAS		a) 0.06-0.12 ppm b) 0.02-0.04 ppm c) 0.002-0.006 ppm d) 0.0006-0.004 ppm e) 0.001-0.02 ppm Wet weight	a) 0.08 ppm b) 0.03 ppm c) 0.004 ppm d) 0.02 ppm e) 0.007 ppm Wet weight	a) Collected 11-12/78 near caustic soda factory b) Collected 12/78 behind battery mill, 2.5 km from factory c) Collected 11/77 behind battery mill, 2.5 km from factory d) Collected 3/78 near chemical company, some distance from factory e) Control from canal in non-industrial area, collected 12/77 53 samples, 5-10 shrimp/sample Thailand SHRIMPS; THAILAND; BODY; BIOACCUMULATION; WATER POLLUTION; MERCURY	Suckcharoen, S. 1980 Bulletin of Environmental Contamination and Toxicology 24:511-516

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Snake, garter
THAMNOPHIS SIRTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
329 Body, whole		Photometry	6	0.14-0.41 ppm wet wt	0.30 ppm wet wt	Snout-vent length 646-752 mm, lipid content 3.2-9.0%. Earthworms in stomachs of 4 snakes contained 0.06-0.17 ppm. Lake Michigan, Spider Island SNAKES; MARYLAND; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; MERCURY; POLYCHLORINATED BIPHENYLS	Heinz, G.H. Hasseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 2':738-743

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Snake, water
NERODIA SIPEDON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
330 Body, whole		Photometry	1	Not applicable	0.45 ppm wet wt	Snout-vent length 855 mm, 6.2% lipid content Lake Michigan, Pilot Island SNAKES; MARYLAND; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; MERCURY; POLYCHLORINATED BIPHENYLS	Heinz, G.H. Hasseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:738-743

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Squirrel, gray
SCIURUS CAROLINENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
331 Hair		AAS	a) 18 b) 18 c) 30 d) 29 e) 23 f) 10 g) 4 h) 34 i) 19 j) 5	a) 0.35-4.3 ppm b) 0.20-9.2 ppm c) 0.07-6.7 ppm d) 0.07-6.7 ppm e) 0.15-9.2 ppm f) 0.23-4.3 ppm g) 0.58-2.2 ppm h) 0.07-6.7 ppm i) 0.12-3.3 ppm j) 0.30-9.2 ppm	a) 1.0 + or - 0.2 ppm b) 1.2 + or - 0.5 ppm c) 1.1 + or - 0.2 ppm d) 1.1 + or - 0.3 ppm e) 1.0 + or - 0.4 ppm f) 0.9 + or - 0.4 ppm g) 1.4 + or - 0.3 ppm h) 1.1 + or - 0.2 ppm i) 0.9 + or - 0.2 ppm j) 2.7 + or - 0.2 ppm	a) Low income stratus b) Middle income stratus c) High income stratus d) Residential area e) Park f) School g) Cemetery h) Age <1 yr i) Age 1 yr j) Age 2 yr or older Animals captured from 36 urban sites in 1974 Significantly higher values in 2 yr and older animals Florida, Jacksonville SQUIRRELS; BIOACCUMULATION; RADIOISOTOPES; URBAN AREAS; CESIUM; MERCURY; HAIR; MUSCLES; FLORIDA; AGE	Jenkins, J.H. Davis, A.H. Bigler, W.J. Hoff, G.L. 1980 Bulletin of Environmental Contamination and Toxicology 25:321-324

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tern, Inca
LAROSTERNA INCA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
332 Feathers			2	Not given	1.98 + or - 0.20 ug/g dry wt	Breast feathers Live or dead birds collected on beaches near Lima, 1972 Humboldt Current, Peru BIRDS; FEATHERS; PERU; BIOACCUMULATION; WATER POLLUTION; MERCURY	Gochfield, M. 1980 Environmental Pollution 22:197-205

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna
EUTHYNNUS OFFINIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
333 Muscle		AAS	18	0.20-0.44 mg/kg	0.30 mg/kg	Random samples. Canned tuna. Acceptable limit in most countries = 0.5 mg/kg Persian Gulf IRAN; MUSCLES; FISHES; WATER POLLUTION; MERCURY	Parvaneh, V. 1979 Bulletin of Environmental Contamination and Toxicology 23:357-359

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna, albacore
THUNNUS ALALUNGA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
334 Muscle			a) 7 b) 3 c) 6 d) 10 e) 6 f) 5 g) 2	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 0.295 + or - 0.060 ppm b) 0.541 + or - 0.089 ppm c) 0.289 + or - 0.033 ppm d) 0.347 + or - 0.080 ppm e) 0.540 + or - 0.112 ppm f) 0.247 + or - 0.088 ppm g) 0.707 ppm Wet wt	a) Pacific, Oregon, length 55-69 cm b) Pacific, Oregon, length 82-89 cm c) Indian Ocean, length 78-88 cm d) Indian Ocean, length 89-99 cm e) Indian Ocean, length 102-109 cm f) Pacific, Ecuador-Peru, length 80-98 cm g) Pacific, Ecuador-Peru, length 106-110 cm White flesh, midsection 1970 catch. Pacific Ocean (N), Oregon Indian Ocean Pacific Ocean (S), Ecuador-Peru ATLANTIC OCEAN; PACIFIC OCEAN; INDIAN OCEAN; BIOACCUMULATION; WATER POLLUTION; FISHES; MERCURY; LIVER; MUSCLES	Greig, R.A. Krzynowek, J. 1979 Bulletin of Environmental Contamination and Toxicology 22:120-127

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna, skipjack
KATSUWONUS PELAMIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
335 Liver			a) 12 b) 8 c) 8 d) 8	a) Not given b) Not given c) Not given d) Not given	a) 0.080 + or - 0.050 ppm b) 0.143 + or - 0.047 ppm c) 0.165 + or - 0.060 ppm d) 0.270 + or - 0.094 ppm Wet wt	a) Eastern Atlantic, length 46-52 cm b) Hawaii, length 52-56 cm, wt 3.1-3.6 kg c) Hawaii, length 4.5-6.8 cm, wt 59-66 kg d) Hawaii, length 71-76 cm, wt 8.2-10.0 kg White flesh, midsection. Data also for other muscle sections 1970 catch. Atlantic Ocean (E) Hawaii ATLANTIC OCEAN; PACIFIC OCEAN; INDIAN OCEAN; BIOACCUMULATION; WATER POLLUTION; FISHES; MERCURY; LIVER; MUSCLES	Greig, R.A. Krzynowek, J. 1979 Bulletin of Environmental Contamination and Toxicology 22:120-127
336 Muscle			a) 12 b) 6 c) 8 d) 8	a) Not given b) Not given c) Not given d) Not given	a) 0.152 + or - 0.070 ppm b) 0.211 + or - 0.038 ppm c) 0.220 + or - 0.096 ppm d) 0.359 + or - 0.082 ppm Wet wt	a) Eastern Atlantic, length 46-52 cm b) Hawaii, length 52-56 cm, wt 3.1-3.6 kg c) Hawaii, length 59-66 cm, wt 4.5-6.8 kg d) Hawaii, length 71-76 cm, wt 8.2-10.0 kg White flesh, midsection. Data also for other muscle sections 1970 catch. Atlantic Ocean (E) Hawaii ATLANTIC OCEAN; PACIFIC OCEAN; INDIAN OCEAN; BIOACCUMULATION; WATER POLLUTION; FISHES; MERCURY; LIVER; MUSCLES	Greig, R.A. Krzynowek, J. 1979 Bulletin of Environmental Contamination and Toxicology 22:120-127

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Tuna, yellowfin
THUNNUS ALBACARES

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
337 Liver			a) 14 b) 7	a) Not given b) Not given	a) 0.321 + or - 0.284 ppm b) 0.154 + or - 0.065 ppm Wet wt	a) Eastern Atlantic (area A), length 138-156 cm b) Eastern Atlantic (area B), length 103-112 cm 1970 catch. Atlantic Ocean (E) ATLANTIC OCEAN; PACIFIC OCEAN; INDIAN OCEAN; BIOACCUMULATION; WATER POLLUTION; FISHES; MERCURY; LIVER; MUSCLES	Greig, R.A. Krzynowek, J. 1979 Bulletin of Environmental Contamination and Toxicology 22:120-127
338 Muscle			a) 15 b) 6 c) 10	a) Not given b) Not given c) Not given	a) 0.350 + or - 0.135 ppm b) 0.158 + or - 0.039 ppm c) 0.186 + or - 0.062 ppm Wet wt	a) Eastern Atlantic (area A), length 138-156 cm b) Eastern Atlantic (area B), length 56-60 cm c) Eastern Atlantic (area B), length 103-112 cm White flesh, midsection. Data also for other muscle sections 1970 catch. Atlantic Ocean (E) ATLANTIC OCEAN; PACIFIC OCEAN; INDIAN OCEAN; BIOACCUMULATION; WATER POLLUTION; FISHES; MERCURY; LIVER; MUSCLES	Greig, R.A. Krzynowek, J. 1979 Bulletin of Environmental Contamination and Toxicology 22:120-127

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Bass, largemouth
MICROPTERUS SALOIDES

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
339 Muscle		GC	5	Not given	0.32 ppm	58% of total Hg Length 23-26 cm Concentration highly size dependent Reservoir constructed in early '70's. Primary source is natural soil Hg. Expected decrease in soil levels within 5 yr. Illinois (S), Jackson and Union Counties, Cedar Lake Reservoir MUSCLES; ILLINOIS; MERCURY; MERCURY ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION	Cox, J.A. Carnahan, J. DiNunzio, J. McCoy, J. Meister, J. 1979 Bulletin of Environmental Contamination and Toxicology 23:779-783

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Beaver
CASTOR CANADENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
340 Intestine			4	Not given	26 ppb	83.9% of total Hg Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
341 Kidney			4	Not given	29 ppb	87.8% of total Hg Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
342 Liver			4	Not given	25 ppb	78.1% of total Hg Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
343 Muscle			4	Not given	27 ppb	84.4% of total Hg Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Chicken

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
344 Eggs	Ingestion	GC	2	a) 4800-6700 ng/g b) 480-490 ng/g	a) 5750 ng/g b) 485 ng/g	a) White, 95% of total Hg b) Yolk, 12.8% of total Hg Total levels 100-1000X higher than in market eggs From domestic chickens accidentally fed fungicide-treated grain. CHICKENS; EGGS; NEW YORK; FUNGICIDES; MERCURY INORGANIC COMPOUNDS; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION	Cappon, C.J. Smith, J.C. 1981a Bulletin of Environmental Contamination and Toxicology 26:472-478

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Deer, whitetail

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
345 Heart		GC	1	Not applicable	46.9 ppb wet wt	43.7% of total Hg Rural area. No known contamination source. New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
346 Liver		GC	1	Not applicable	43.4 ppb wet wt	33.4% of total Hg Rural area. No known contamination source. New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
347 Muscle		GC	1	Not applicable	18.5 ppb wet wt	20% of total Hg Rural area. No known contamination source. New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Otter
LUTRA CANADENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
348 Intestine			4	Not given	391 ppb	93.3% of total Hg Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
349 Kidney			4	Not given	648 ppb	62% of total Hg Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
350 Liver			4	Not given	889 ppb	29.9% of total Hg Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
351 Muscle			4	Not given	640 ppb	72.9% of total Hg Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Raccoon
PROCYN LOTOR

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
352 Kidney			4	Not given	425 ppb	87.8% of total Hg Wt 50 + or - 0.86 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
353 Liver			4	Not given	484 ppb	10.7% of total Hg Wt 50 + or - 0.86 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105
354 Muscle			4	Not given	235 ppb	84.8% of total Hg Wt 50 + or - 0.86 kg (pelt not included) No direct sources of contamination in trapping area Canada, PreCambrian Shield, Ontario Muskoka District BEAVERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25:100-105

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Seal

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
355 Liver		GC	1	Not applicable	478.2 ppb wet wt	9.1% of total Hg Canada, Quebec (N), Inuit Eskimo Community DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

(NEXT PAGE)

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-H3-Hg
MW 215.63
Seal

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
356 Muscle		GC	1	Not applicable	267.9 ppb wet wt	62.9% total Hg Canada, Quebec (N), Inuit Eskimo Community DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; REDCORT; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

Molybdenum
7439-98-7
Mo
Atw 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Antelope, pronghorn
ANTILOCAPRA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
357 Kidney		AAS	27	< 2 ug/g dry wt	Not given	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
358 Liver		AAS		< 2 ug/g dry wt	Not given	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Molybdenum
7439-98-7
Mo
AtW 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Cattle
ECS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
359 Blood	Ingestion	AAS	28	a) Not applicable b) 0.006-0.096 ppm c) Not applicable d) 0.030-0.060 ppm	a) < 0.01 ppm b) 0.035 ppm c) < 0.01 ppm d) 0.048 ppm	a) Pastures fertilized with treated raffinate, pre-test b) Pastures fertilized with treated raffinate, post-test c) Controls, pre-test d) Controls, post-test Grazing on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
360 Kidney		AAS	190	Not detected-1.85 ppm wet wt	0.31 + or - 0.28 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
361 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 1.35 ppm b) 5.04 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
362 Liver		AAS	190	< 0.15-2.81 ppm wet wt	0.88 + or - 0.39 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

(NEXT PAGE)

Molybdenum
7439-98-7
Mo
AtW 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
363 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 1.83 ppm b) 4.58 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC, BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
364 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.90 ppm b) 3.89 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing on 6 mo plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; CHROMIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

Molybdenum
7439-98-7
Mo
AtW 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Deer, mule
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
365 Kidney		AAS	30	< 2 ug/g dry wt	Not given	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

(NEXT PAGE)

Molybdenum
7439-98-7
Mo
At# 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Deer, mule
ODOCOILEUS HEMIONUS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
366 Kidney		AAS	a) 12 b) 6	a) 0.9-4.0 ppm b) 1.3-2.4 ppm Dry wt	a) 2.4 + or - 1.0 ppm b) 1.9 + or - 2.4 ppm Dry wt	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182
367 Liver		AAS		< 2 ug/g dry wt	Not given	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
368 Liver		AAS	a) 12 b) 6	a) 0.6-2.8 ppm b) 0.7-2.4 ppm Dry wt	a) 1.3 + or - 0.7 ppm b) 1.2 + or - 0.6 ppm Dry wt	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182

Molybdenum
7439-98-7
Mo
At# 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Mouse, deer
PEROMYSCUS MANICULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
369 Kidney		AAS	a) 45 b) 45 c) 45	a) 4.2-6.9 ppm b) 4.9-8.7 ppm c) 6.8-9.2 ppm Dry wt	a) 5.7 + or - 0.7 ppm b) 6.9 + or - 1.2 ppm c) 7.8 + or - 0.7 ppm Dry wt	a) Pinyon-juniper habitat b) Mountain shrub habitat c) Big sagebrush habitat Significant difference in levels between habitats (P<0.05) Captured 6/78 near oil shale tracts before mining initiated. Organ of choice for baseline sampling. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182

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Molybdenum
7439-98-7
Mo
AtW 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
House, deer
PEROMYSCUS MANICULATUS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
370 Liver		AAS	a) 45 b) 45 c) 45	a) 4.1-9.0 ppm b) 5.8-12.0 ppm c) 5.7-10.0 ppm Dry wt	a) 6.5 + or - 1.4 ppm b) 8.9 + or - 1.8 ppm c) 5.7 + or - 10.0 ppm Dry wt	a) Pinyon-juniper habitat b) Mountain shrub habitat c) Big sagebrush habitat Significant difference in levels between habitats (P<0.05) Captured 6/78 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; ECHES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Antelope, pronghorn
ANTILOCAPRA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
371 Kidney		AAS		Most were < 0.5 mg/g dry wt	Not given	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshover, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
372 Liver		AAS		Most were < 0.5 mg/g dry wt	Not given	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshover, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Cattle
ECS ap.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
373 Blood	Ingestion	AAS	20	a) Not applicable b) Not applicable	a) 0.10 ppm b) 0.10 ppm	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, N.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
374 Kidney		AAS	190	Not detected-5.80 ppm wet wt	0.46 + or - 0.87 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
375 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.10 ppm b) 0.16 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, N.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
376 Liver		AAS	190	< 0.04-6.82 ppm wet wt	0.33 + or - 0.54 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

(NEXT PAGE)

Nickel
7440-02-0
Ni
Atw 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
377 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.13 ppm b) 0.07 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
378 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.16 ppm b) 0.15 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

Nickel
7440-02-0
Ni
Atw 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Deer, mule
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
379 Kidney		AAS		Most were < 0.5 mg/g dry wt	Not given	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

(NEXT PAGE)

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Deer, mule
ODOCOILEUS HEMIONUS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
380 Liver		AAS		Most were < 0.5 mg/g dry wt	Not given	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; POLYBROMUS; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Nickel
7440-02-0
Ni
AtW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Grouse, ruffed
BONASSA UMBELLUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
381 Feathers		AAS	130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.06 + or - 0.05 ug/g b) 0.02 + or - 0.02 ug/g c) 0.06 + or - 0.05 ug/g d) 0.02 + or - 0.02 ug/g e) 0.01 + or - 0.01 ug/g f) 0.10 + or - 0.09 ug/g Dry wt	a) 77 adults b) 53 juveniles c) 88 males d) 42 females e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest Wing and tail feathers Birds shot by hunters in remote forest area. Virginia (SW) BIRDS; FEATHERS; JUVENILES; CADMIUM; COPPER; LEAD; NICKEL; SILVER; ZINC; VIRGINIA; ADULTS	Scanlon, P.F. Oderwald, R.G. Dietrick, T.J. Coggin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25:947-949

Octanohydroxamic acid (8 CI)
Octanamide, N-hydroxy- (9 CI)
7377-03-9
C8-H17-N-O2
MW 159.23, MP 78.5-79 C
Trout, brook
SALVELINUS FONTINALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
382 Adipose		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 3.5 + or - 2.8 ug/g c) 6.5 + or - 2.3 ug/g c) 8.6 + or - 6.2 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270

(NEXT PAGE)

Octanohydroxamic acid (8 CI)
Octanamide, N-hydroxy- (9 CI)
7377-03-9
C8-817-N-02
FW 159.23, MP 78.5-79 C
Trout, brook
SALVELINUS FONTINALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
383 Bile		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 257.2 + or - 184.4 ug/g b) 607.5 + or - 184.4 ug/g c) 437.6 + or - 202.1 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
384 Blood, plasma		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 4.9 + or - 2.3 ug/g b) 7.4 + or - 3.2 ug/g c) 10.5 + or - 1.9 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
385 Brain		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 12.3 + or - 5.3 ug/g b) 17.1 + or - 1.0 ug/g c) 25.2 + or - 9.4 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
386 Cecum		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 10.9 + or - 4.2 ug/g b) 22.5 + or - 3.2 ug/g c) 26.9 + or - 2.9 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270

(NEXT PAGE)

Octanohydroxamic acid (9 CI)
Octanamide, N-hydroxy- (9 CI)
7377-03-9
C8-H17-N-O2
Mw 159.23, MP 78.5-7 C
Trout, brook
SALVELINUS FONTINALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
387 Gills		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 19.0 + or - 4.3 ug/g b) 25.5 + or - 3.6 ug/g c) 31.6 + or - 6.3 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
388 Gonads		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 6.6 + or - 2.4 ug/g b) 13.8 + or - 8.3 ug/g c) 24.0 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
389 Heart		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 6.8 + or - 3.3 ug/g b) 11.8 + or - 5.7 ug/g c) 14.2 + or - 4.9 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
390 Intestine		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 10.6 + or - 4.4 ug/g b) 22.8 + or - 7.0 ug/g c) 33.5 + or - 8.1 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270

(NEXT PAGE)

Octanohydroxamic acid (8 CI)
Octanamide, N-hydroxy- (9 CI)
7377-03-9
C8-H17-N-O2
MW 159.23, MF 78.5-79 C
Trout, brook
SALVELINUS FONTINALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
391 Blood		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 11.3 + or - 4.5 ug/g b) 14.7 + or - 4.8 ug/g c) 25.9 + or - 7.2 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 ug/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
392 Liver		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 26.4 + or - 11.5 ug/g b) 38.6 + or - 12.5 ug/g c) 40.5 + or - 5.2 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 ug/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
393 Muscle		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 2.8 + or - 0.5 ug/g b) 4.0 + or - 1.2 ug/g c) 4.7 + or - 0.5 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 ug/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
394 Skin		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 18.7 + or - 4.5 ug/g b) 20.4 + or - 3.7 ug/g c) 30.1 + or - 10.5 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 ug/l n-octano-1-C14-hydroxamic acid Fish wt 75-150 g. CECUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270

(NEXT PAGE)

Octanohydro .aic acid (9 CI)
Octanamide, N-hydroxy- (9 CI)
7377-03-9
C8-817-N-02
MW 159.23, MP 78.5-79 C
Trout, brook
SALVELINUS FONTINALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
395 Spleen		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 19.7 + or - 7.1 ug/g b) 23.5 + or - 9.0 ug/g c) 23.5 + or - 6.6 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C10-hydroxamic acid Fish wt 75-150 g. CHCOR; BONES; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
396 Stomach		Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 7.4 + or - 3.3 ug/g b) 10.2 + or - 4.4 ug/g c) 14.7 + or - 2.9 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C10-hydroxamic acid Fish wt 75-150 g. CHCOR; BONES; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	Darrow, D.C. Addison, R.F. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270

Phenol, pentachloro-
87-86-5
C6-H-C15-O
MW 266.35, MP 190-191 C, BP 309-310 C (decomp), VP 90 mm Hg at 211.2 C
Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
397 Blood	Ingestion		24	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 82.5 + or - 8.81 ppm b) 78.3 + or - 5.28 ppm c) 68.7 + or - 6.74 ppm d) 67.6 + or - 12.5 ppm e) 71.5 + or - 77.0 ppm f) 77.0 + or - 12.7 ppm g) 0.53 + or - 0.27 ppm h) 0.74 + or - 0.19 ppm Wet wt	a) After 5 mg/kg body wt/day for 15 days b) After 5 mg/kg body wt/day for 30 days c) After 10 mg/kg body wt/day for 15 days d) After 10 mg/kg body wt/day for 30 days e) After 15 mg/kg body wt/day for 15 days f) After 15 mg/kg body wt/day for 30 days g) Controls, given lactone for 15 days h) Controls, given lactone for 30 days 6 wk old pigs. No overt signs of toxicosis. Enlarged livers, increased urea nitrogen levels and lowered white blood cell counts in 10 and 15 mg/kg groups. JUVENILES; PIGS; SOUTH DAKOTA; AUTOPSIES; BLOOD; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; CHLORINE ORGANIC COMPOUNDS	Greichus, Y.A. Libal, G.W. Johnson, D.D. 1979 Bulletin of Environmental Contamination and Toxicology 23:418-422
398 Kidney	Ingestion		a) 6 b) 6 c) 6 d) 6	a) Not given b) Not given c) Not given d) Not given	a) 22.0 + or - 3.16 ppm b) 25.2 + or - 4.20 ppm c) 26.6 + or - 3.27 ppm d) 0.21 + or - 0.07 ppm Wet wt	a) After 5 mg/kg body wt/day for 30 days b) After 10 mg/kg body wt/day for 30 days c) After 15 mg/kg body wt/day for 30 days d) Controls 6 wk old pigs. No overt signs of toxicosis. Enlarged livers, increased urea nitrogen levels and lowered white blood cell counts in 10 and 15 mg/kg groups. JUVENILES; PIGS; SOUTH DAKOTA; AUTOPSIES; BLOOD; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; CHLORINE ORGANIC COMPOUNDS	Greichus, Y.A. Libal, G.W. Johnson, D.D. 1979 Bulletin of Environmental Contamination and Toxicology 23:418-422
399 Liver	Ingestion		a) 6 b) 6 c) 6 d) 6	a) Not given b) Not given c) Not given d) Not given	a) 29.9 + or - 10.7 ppm b) 26.1 + or - 1.89 ppm c) 28.8 + or - 4.65 ppm d) 0.54 + or - 0.12 ppm Wet wt	a) After 5 mg/kg body wt/day for 30 days b) After 10 mg/kg body wt/day for 30 days c) After 15 mg/kg body wt/day for 30 days d) Controls 6 wk old pigs. No overt signs of toxicosis. Enlarged livers, increased urea nitrogen levels and lowered white blood cell counts in 10 and 15 mg/kg groups. JUVENILES; PIGS; SOUTH DAKOTA; AUTOPSIES; BLOOD; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; CHLORINE ORGANIC COMPOUNDS	Greichus, Y.A. Libal, G.W. Johnson, D.D. 1979 Bulletin of Environmental Contamination and Toxicology 23:418-422

(NEXT PAGE)

Phenol, pentach.. ro-
87-86-5
C6-H-C15-O
MW 266.35, MP 190-191 C, BP 309-310 C (decomp), VP 80 mm Hg at 211.2 C
Swine
SUS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
400 Muscle	Ingestion		a) 6 b) 6 c) 6 d) 6	a) Not given b) Not given c) Not given d) Not given	a) 6.74 + or - 0.95 ppm b) 7.75 + or - 1.04 ppm c) 8.85 + or - 1.36 ppm d) 0.14 + or - 0.13 ppm Wet wt	a) After 5 mg/kg body wt/day for 30 days b) After 10 mg/kg body wt/day for 30 days c) After 15 mg/kg body wt/day for 30 days d) Controls 6 wk old pigs. No overt signs of toxicosis. Enlarged livers, increased urea nitrogen levels and lowered white blood cell counts in 10 and 15 mg/kg groups. JUVENILES; PIGS; SOUTH DAKOTA; AUTOPSIES; BLOOD; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; CHLORINE ORGANIC COMPOUNDS	Greichus, Y.A. Libal, G.W. Johnson, D.D. 1979 Bulletin of Environmental Contamination and Toxicology 23:418-422

Phenol, 2,2'-methylenebis(3,4,6-trichloro-
70-30-4
C13-H6-C16-O2
MW 406.92, MP 164-165 C
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
401 Adipose	Ingestion	GC	2	5-10 mg/g wet wt	8 mg/g wet wt	Lactating cows, wt 550 kg. 4 mg/kg HCP and 10 mg/kg Cu-glycinate in diet daily for 2 d. Killed 3 d after 2nd dose. CATTLE; LACTATION; BIOACCUMULATION; LACTATION; PESTICIDE RESIDUES; HEXACHLOROBENZENE; ADIPOSE TISSUE; BLOOD; LIVER; MUSCLES; JAPAN	Kawashima, Y. Miyahara, T. Kozuka, H. Ohdaira, C. 1981 Bulletin of Environmental Contamination and Toxicology 26:424-427
402 Blood	Ingestion	GC	2	6-10 mg/ml	8 mg/ml	Lactating cows, wt 550 kg. 4 mg/kg HCP and 10 mg/kg Cu-glycinate in diet daily for 2 d. Killed 3 d after 2nd dose. CATTLE; LACTATION; BIOACCUMULATION; LACTATION; PESTICIDE RESIDUES; HEXACHLOROBENZENE; ADIPOSE TISSUE; BLOOD; LIVER; MUSCLES; JAPAN	Kawashima, Y. Miyahara, T. Kozuka, H. Ohdaira, C. 1981 Bulletin of Environmental Contamination and Toxicology 26:424-427
403 Liver	Ingestion	GC	2	210-230 mg/g wet wt	220 mg/g wet wt	Lactating cows, wt 550 kg. 4 mg/kg HCP and 10 mg/kg Cu-glycinate in diet daily for 2 d. Killed 3 d after 2nd dose. CATTLE; LACTATION; BIOACCUMULATION; LACTATION; PESTICIDE RESIDUES; HEXACHLOROBENZENE; ADIPOSE TISSUE; BLOOD; LIVER; MUSCLES; JAPAN	Kawashima, Y. Miyahara, T. Kozuka, H. Ohdaira, C. 1981 Bulletin of Environmental Contamination and Toxicology 26:424-427

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Phenol, 2,2'-methylenebis(3,4,6-trichloro-
70-30-4
C13-H6-Cl6-O2
MW 406.92, MP 164-165 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
404 Muscle	Ingestion	GC	2	20-35 mg/g wet wt	28 mg/g wet wt	Lactating cows, wt 550 kg. 4 mg/kg HCP and 10 mg/kg Cu-glycinate in diet daily for 2 d. Killed 3 d after 2nd dose. CATTLE; LACTATION; BIOACCUMULATION; LACTATION; PESTICIDE RESIDUES; HEXACHLOROBENZENE; ADIPOSE TISSUE; DIOCD; LIVER; MUSCLES; JAPAN	Kawashima, Y. Miyahara, T. Kozuka, H. Ohdaira, C. 1981 Bulletin of Environmental Contamination and Toxicology 26:424-427

Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI)
Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)
55-38-9
C10-H15-O3-P-S2
MW 278.34 C, BP 105 C, VP 3X10(E-5) mm Hg at 20 C
Magpie
PICA PICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
405 Gizzard	Ingestion	GC	10	7.29-483 mg/kg wet wt	87.10 mg/kg wet wt	Lining plus contents. Dead birds found near feed where cattle were treated for warble larvae and lice. Canada, Alberta Generally good body condition. Inability to fly just before death. Bruises and bone fractures, congestion of skull bones. CANADA; AUTOPSIES; GIZZARD; BIRDS; ORGANOPHOSPHATES; BIOACCUMULATION; PESTICIDE RESIDUES	Hanson, J. Howell, J. 1981 Canadian Veterinary Journal 22:18-19

Polonium, isotope of mass 210
13981-52-7
Po
MW 210, MP 254 C, BP 962 C
Cattle
BOS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
406 Kidney			a) 35 b) Not given	a) 57.8-387.3 pCi/kg wet wt b) Not given	a) 152.4 pCi/kg b) 178.5 pCi/kg Wet wt Medians	a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from previous publication) 2 yr olds Germany, Eifel area CATTLE; LEAD 210; POLONIUM 210; GERMANY; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; LEAD; BIOACCUMULATION; FIRING; RADIONUCLIDES	Bunzl, K. Kracke, W. 1980 Food and Cosmetics Toxicology 18:133-137

(NEXT PAGE)

Polonium, isotope of mass 210
13981-52-7
Tc
RN 210, NP 254 C, BP 962 C
Cattle
BCS app.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
407 Liver			a) 35 b) Not given	a) 13.9-159 pCi/kg wet wt b) Not given	a) 33.3 pCi/kg b) 35.8 pCi/kg Wet wt Medians	a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from previous publication) 2 yr olds Germany, Eifel area CATTLE; LEAD 210; POLONIUM 210; GERMANY; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; LEAD; BIOACCUMULATION; MINING; RADIONUCLIDES	Bunzl, K. Kracke, W. 1980 Food and Cosmetics Toxicology 18:133-137

Pyrene
129-00-0
C16-H10
MW 202.26, MP 156 C, BP 404 C
Bass, black sea
CENTROPRITUS STRICTA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
408 Body, whole		GC UV		Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.23 Composite sample of several organisms collected in oil drilling area, depth 57 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene
129-00-0
C16-H10
MW 202.26, MP 156 C, BP 404 C
Butterfish
PAPRILUS TRIACANTHUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
409 Body, whole		GC UV		Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.29 Composite sample of several organisms collected in oil drilling area, depth 39 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene
129-00-0
C16-H10
MW 202.24, MP 156 C, BP 404 C
Flounder, summer
PARALICHTHYS DENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
410 Body, whole		GC UV		Not given	2 ppb wet wt	Dry wt/wet wt = 0.21 Collected in oil drilling area, depth 102 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene
129-00-0
C16-H10
MW 202.24, MP 156 C, BP 404 C
Hake, red
ARCHPHYSATE CHUSS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
411 Body, whole		GC UV		Not given	< 5 ppb wet wt	Composite sample of several organisms Collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene
129-00-0
C16-H10
MW 202.24, MP 156 C, BP 404 C
Scallop, sea
PLACOPECTEN MAGELLANICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
412 Body, whole		GC UV		Not given	4.1 ppb wet wt	Composite sample of several organisms Collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene
129-00-0
C16-H10
MW 202.24, MP 156 C, BP 404 C
Scup
STENOTOMUS CHRYSOPS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
413 Body, whole		GC UV		Not given	2 ppb wet wt	Dry wt/wet wt = 0.26 Composite sample of several organisms Collected in oil drilling area, depth 66 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene, methyl-
27577-90-8
C17-H12
MW 216.29
Bass, black sea
CENTROPRITUS STRICTA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
414 Body, whole		GC UV		Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.23 Composite sample of several organisms Collected in oil drilling area, depth 57 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene, methyl-
27577-90-8
C17-H12
MW 216.29
Butterfish
PAPRILOS TRIACANTHUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
415 Body, whole		GC UV		Not given	< 2 ppb wet wt	Dry wt/wet wt = 0.29 Composite sample of several organisms Collected in oil drilling area, depth 35 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene, methyl-
27577-90-8
C17-H12
MW 216.29
Flounder, summer
PARALICHTHYS DENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
416 Body, whole		GC UV		Not given	1 ppb wet wt	Dry wt/wet wt = 0.21 Composite sample of several organisms collected in oil drilling area, depth 102 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene, methyl-
27577-90-8
C17-H12
MW 216.29
Hake, red
ANOPHYSATE CHUSS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
417 Body, whole		GC UV		Not given	< 6 ppb wet wt	Composite sample of several organisms collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene, methyl-
27577-90-8
C17-H12
MW 216.29
Scallop, sea
PLACOPECTEN MAGELLANICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
418 Body, whole		GC UV		Not given	2.7 ppb wet wt	Composite sample of several organisms collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, B.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene, methyl-
27577-90-8
C17-H12
MW 216.29
Scup
STENOTOMUS CHRYSOPS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
419 Body, whole		GC UV	6	Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.26 Composite sample of several organisms collected in oil drilling area, depth 66 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, E.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):678-679

Radium, isotope of mass 226
13982-63-3
Ra
RW 226, MP 700 C, BP 1737 C
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
420 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.003 pCi/g b) 0.005 pCi/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
421 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.002 pCi/g b) 0.002 pCi/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

(NEXT PAGE)

Radium, isotope of mass 226
13982-63-3
Ra
RW 226, MP 700 C, BP 1737 C
Cattle
ECS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
422 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.001 pCi/g b) 0.002 pCi/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 4 mc on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Cattle
ECS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
423 Kidney		AAS	190	0.47-1.77 ppm wet wt	1.10 + or - 0.31 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
424 Liver		AAS	190	0.01-0.63 ppm wet wt	0.17 + or - 0.11 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Chicken

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
425 Eggs		GC	2	a) 150-240 ng/g b) Not applicable c) 1300-1500 ng/g d) 400-500 ng/g	a) 195 ng/g b) 25 ng/g c) 1400 ng/g d) 450 ng/g	a) White, Se II, IV b) White, Se VI c) Yolk, Se II, IV d) Yolk, Se VI Higher levels than in market eggs from domestic chickens accidentally fed grain treated with a mercurial fungicide. CHICKENS; EGGS; NEW YORK; FUNGICIDES; MERCURY INORGANIC COMPOUNDS; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION	Cappon, C.J. Smith, J.C. 1981a Bulletin of Environmental Contamination and Toxicology 26:472-478

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Deer, whitetail

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
426 Heart		GC	1	a) Not applicable b) Not applicable	a) 160.5 ppb b) 46.0 ppb Wet wt	a) Se II, IV b) Se VI Rural area. No known contamination source. New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
427 Liver		GC	1	a) Not applicable b) Not applicable	a) 264.5 ppb b) 39.5 ppb Wet wt	a) Se II, IV b) Se VI Rural area. No known contamination source. New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
428 Muscle		GC	1	a) Not applicable b) Not applicable	a) 133.8 ppb b) 75.9 ppb Wet wt	a) Se II, IV b) Se VI Rural area. No known contamination source. New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Pike, northern
ESOX LUCIUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
429 Muscle		AAS	a) 19 b) 18	a) 1.1-3.0 mg/kg b) <0.20-0.62 mg/kg Wet wt	a) 2.1 mg/kg wet wt b) Not applicable	a) Lake Dufault. Length 52.0-81.5 cm, wt 750-2840 g b) Lake Duparquet. Length 40.0-81.5 cm, wt 215-3350 g Levels not related to size Collected summer '77. Canada, Quebec (NW), Lake Dufault Canada, Quebec (NW), Lake Duparquet CANADA; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; SELENIUM	Speyer, M.R. 1980 Bulletin of Environmental Contamination and Toxicology 24:427-432

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Seal

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
430 Liver		GC	1	a) Not applicable b) Not applicable	a) 2924.6 ppb b) 598.8 ppb Wet wt	a) Se II, IV b) Se VI Canada, Quebec (N), Inuit Eskimo Community DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
431 Muscle		GC	1	a) Not applicable b) Not applicable	a) 167.2 ppb b) 123.2 ppb Wet wt	a) Se II, IV b) Se VI Canada, Quebec (N), Inuit Eskimo Community DEER; SEALS; CANADA; NEW YORK; HEART, LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELENIUM	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

Silver
7440-22-4
Ag
AtW 107.868, MP 960.5 C, BP 2000 C, VP 1 mm Hg at 1310 C, 10 mm Hg at 1540 C
Clam, surf
SPISULA SOLIDISSIMA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
432 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 2.1 + or - 0.80 ppb b) 3.1 + or - 1.68 ppb c) 6.0 + or - 2.65 ppb d) 6.1 + or - 1.47 ppb e) 10.3 + or - 2.98 ppb f) 20.4 + or - 5.29 ppb g) 1.4 + or - 0.70 ppb h) 1.7 + or - 1.20 ppb i) 0.75 + or - 0.51 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Ag-seawater solutions, a)-f) Controls, in seawater Shells removed before analysis MOLLUSKS; CADMIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; ECET; COMPARATIVE EVALUATIONS; CONNECTICUT	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647

Silver
7440-22-4
Ag
AtW 107.868, MP 960.5 C, BP 2000 C, VP 1 mm Hg at 1310 C, 10 mm Hg at 1540 C
Grouse, ruffed
BONASSA UMBELLUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
433 Feathers		AAS	130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) < 0.01 ug/g b) < 0.01 ug/g c) < 0.01 ug/g d) < 0.01 ug/g e) < 0.01 ug/g f) < 0.01 ug/g Dry wt	a) 77 adults b) 53 juveniles c) 88 males d) 42 females e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest Wing and tail feathers Birds shot by hunters in remote forest area. Virginia (SW) BIRDS; FEATHERS; JUVENILES; CADMIUM; COPPER; LEAD; NICKEL; SILVER; ZINC; VIRGINIA; ADULTS	Scanlon, P.F. Oderwald, R.G. Dietrick, T.J. Coggin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25:947-949

Silver
7440-22-4
Ag
AtW 107.868, MP 960.5 C, BP 2000 C, VP 1 mm Hg at 1310 C, 10 mm Hg at 1540 C
Oyster
CRASSOSTREA VIRGINICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
434 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 5.4 + or - 2.26 ppb b) 9.2 + or - 4.75 ppb c) 15.4 + or - 7.19 ppb d) 9.5 + or - 3.28 ppb e) 13.7 + or - 8.85 ppb f) 23.2 + or - 7.51 ppb g) 1.5 + or - 0.33 ppb h) 1.5 + or - 0.34 ppb i) 1.3 + or - 0.35 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Aq-sea ter solutions, a)-f) Controls in seawater Shells removed before analysis PCILUSKS; CADMIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; ECOT; COMPARATIVE EVALUATIONS; CONNECTICUT	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647

Silver
7440-22-4
Ag
AtW 107.868, MP 960.5 C, BP 2000 C, VP 1 mm Hg at 1310 C, 10 mm Hg at 1540 C
Quahog
ARCTICA ISLANDICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
435 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 4.5 + or - 2.90 ppb b) 2.7 + or - 1.36 ppb c) 3.5 + or - 1.93 ppb d) 4.7 + or - 2.16 ppb e) 5.0 + or - 2.57 ppb f) 5.1 + or - 2.45 ppb g) 2.7 + or - 1.15 ppb h) 3.2 + or - 1.90 ppb i) 2.5 + or - 1.51 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Aq-seawater solutions, a)-f) Controls in seawater Shells removed before analysis PCILUSKS; CADMIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; ECOT; COMPARATIVE EVALUATIONS; CONNECTICUT	Greig, R.a. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
57-68-1
C12-H14-N4-O2-S
MW 278.32, MP 176 C (also reported: 178-179 C, 198-199 C, 205-207 C)
Swine
SCS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
436 Adipose	Ingestion	Colorimetry	a) 3 b) 3 c) 3 d) 3 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.90 + or - 0.30 ppm b) 0.43 + or - 0.12 ppm c) 0.10 + or - 0.02 ppm d) 0.02 + or - 0.01 ppm e) 0.01 + or - 0.01 ppm	a) Last medication day b) Withdrawal day 2 c) Withdrawal day 4 d) Withdrawal day 6 e) Withdrawal day 8 Yorkshire-cross weanlings, at 18.0-42.7 kg, on 500 g/ton of feed for 30 days Non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm. SULFONAMIDES; SWINE; BIOACCUMULATION; ADIPOSE TISSUE; BLOOD PLASMA; KIDNEYS; LIVER; MUSCLES; DRUGS; MARYLAND	Samuelson, G. Whipple, D.M. Showalter, D.M. Jacobson, W.C. Heath, G.E. 1979 Journal of the American Veterinary Medical Association 175(5):449-452
437 Blood, plasma	Ingestion	Colorimetry	15	a) 22.6-35.2 ppm b) 23.3-36.8 ppm c) 20.2-35.5 ppm d) 15.4-23.4 ppm e) 7.1-24.3 ppm f) 2.2-9.5 ppm g) 0-2.0 ppm	a) 30.7 + or - 0.9 ppm b) 30.8 + or - 1.0 ppm c) 27.2 + or - 1.0 ppm d) 19.7 + or - 0.7 ppm e) 12.5 + or - 1.2 ppm f) 4.9 + or - 0.5 ppm g) 0.5 + or - 0.2 ppm	a) 0 hr b) 4 hr c) 8 hr d) 12 hr e) 24 hr f) 48 hr g) 72 hr Postmedication Yorkshire cross-weanlings, wt 18.0-42.7 kg, on 500 g/ton of feed for 30 days Non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm. SULFONAMIDES; SWINE; BIOACCUMULATION; ADIPOSE TISSUE; BLOOD PLASMA; KIDNEYS; LIVER; MUSCLES; DRUGS; MARYLAND	Samuelson, G. Whipple, D.M. Showalter, D.M. Jacobson, W.C. Heath, G.E. 1979 Journal of the American Veterinary Medical Association 175(5):449-452
438 Kidney	Ingestion	Colorimetry	a) 3 b) 3 c) 3 d) 3 e) 3 f) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 16.07 + or - 0.67 ppm b) 1.86 + or - 0.46 ppm c) 0.22 + or - 0.07 ppm d) 0.16 + or - 0.06 ppm e) 0.08 + or - 0.05 ppm f) 0.01 + or - 0.01 ppm	a) Last medication day b) Withdrawal day 2 c) Withdrawal day 4 d) Withdrawal day 6 e) Withdrawal day 8 f) Withdrawal day 10 Yorkshire-cross weanlings, wt 18.0-42.7 kg, on 500 g/ton of feed for 30 days Non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm. SULFONAMIDES; SWINE; BIOACCUMULATION; ADIPOSE TISSUE; BLOOD PLASMA; KIDNEYS; LIVER; MUSCLES; DRUGS; MARYLAND	Samuelson, G. Whipple, D.M. Showalter, D.M. Jacobson, W.C. Heath, G.E. 1979 Journal of the American Veterinary Medical Association 175(5):449-452
439 Liver	Ingestion	Colorimetry	a) 3 b) 3 c) 3 d) 3 e) 3 f) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 18.27 + or - 0.91 ppm b) 2.81 + or - 0.40 ppm c) 0.37 + or - 0.10 ppm d) 0.05 + or - 0.03 ppm e) 0.12 + or - 0.08 ppm f) 0.06 + or - 0.02 ppm	a) Last medication day b) Withdrawal day 2 c) Withdrawal day 4 d) Withdrawal day 6 e) Withdrawal day 8 f) Withdrawal day 10 Yorkshire-cross weanlings, wt 18.0-42.7 kg, on 500 g/ton of feed for 30 days Non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm. SULFONAMIDES; SWINE; BIOACCUMULATION; ADIPOSE TISSUE; BLOOD PLASMA; KIDNEYS; LIVER; MUSCLES; DRUGS; MARYLAND	Samuelson, G. Whipple, D.M. Showalter, D.M. Jacobson, W.C. Heath, G.E. 1979 Journal of the American Veterinary Medical Association 175(5):449-452

(NEXT PAGE)

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI)
Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
57-68-1
C12-H14-N4-O2-S
MW 278.32, MP 176 C (also reported: 176-179 C, 198-199 C, 205-207 C)
Swine
SUS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
440 Muscle	Ingestion	Colorimetry	a) 3 b) 3 c) 3 d) 3 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 5.77 + or - 0.37 ppm b) 0.67 + or - 0.16 ppm c) 0.09 + or - 0.02 ppm d) 0.02 + or - 0.00 ppm e) 0.02 + or - 0.01 ppm	a) Last medication day b) Withdrawal day 2 c) Withdrawal day 4 d) Withdrawal day 6 e) Withdrawal day 8 Yorkshire-cross weanlings, wt 10.0-42.7 kg, on 500 g/ton of feed for 30 days Non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm. SULFONAMIDES; SWINE; BIOACCUMULATION; ADIPOSE TISSUE; BLOOD PLASMA; KIDNEYS; LIVER; MUSCLES; DRUGS; MARYLAND	Samuelson, G. Whipple, D.V. Shoemaker, D.H. Jacobson, W.C. Heath, G.E. 1979 Journal of the American Veterinary Medical Association 175(5):449-452

Thorium, isotope of mass 230
14269-63-7
Th
MW 230
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
441 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.0004 pCi/g b) 0.0003 pCi/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; CHLAMONA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
442 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.0003 pCi/g b) 0.0002 pCi/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; CHLAMONA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

(NEXT PAGE)

Thorium, isotope of mass 230
14269-63-7
Th
MW 230
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
Milk Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.0003 pCi/g b) 0.0004 pCi/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

Total DDT (No postings in CHEMLINE).
50-29-3
C14-H9-Cl5
MW 354.50
Crow
CORVUS BRACHYRHYNCHOS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
Milk Muscle			14	Not given	4.3 ppm wet wt (923 ppm lipid wt) Geometric mean	Sum of isomers and metabolites lipid wt value exceeds 5 ppm tolerance for human consumption of domestic animals Collected near former DDT manufacturing plant nearly 10 yr after cessation of production. Alabama, Wheeler National Wildlife Refuge Implied reproductive effects BIRDS; RABBITS; ALABAMA; BODY; MUSCLES; BIOACCUMULATION; INDUSTRIAL POLLUTION; LAND POLLUTION; PESTICIDE RESIDUES; WATER POLLUTION; DDT	O'Shea, T.J. Fleming, W.J., III Lemartie, E. 1980 Science 209:509-510

Total DDT (No postings in CHEMLINE)
50-29-3
C14-H9-Cl5
MW 354.50
Luch, Ballard
ANAS PLATYRHYNCHOS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
445 Body, whole			27	Not given	4.0 ppm wet wt (38.0 ppm lipid wt) Geometric mean	Sum of isomers and metabolites Lipid wt value exceeds 5 ppm tolerance for human consumption of domestic animals Collected near former DDT manufacturing plant nearly 10 yr after cessation of production. Alabama, Wheeler National Wildlife Refuge Implied reproductive effects BIRDS; RABBITS; ALABAMA; BODY; MUSCLES; BIOACCUMULATION; INDUSTRIAL POLLUTION; LAND POLLUTION; PESTICIDE RESIDUES; WATER POLLUTION; DDT	O'Shea, T.J. Fleming, W.J., III Comartie, E. 1980 Science 209:509-510
446 Muscle			27	Not given	0.67 ppm wet wt (11.5 ppm lipid wt) Geometric mean	Sum of isomers and metabolites Lipid wt value exceeds 5 ppm tolerance for human consumption of domestic animals Collected near former DDT manufacturing plant nearly 10 yr after cessation of production. Alabama, Wheeler National Wildlife Refuge Implied reproductive effects BIRDS; RABBITS; ALABAMA; BODY; MUSCLES; BIOACCUMULATION; INDUSTRIAL POLLUTION; LAND POLLUTION; PESTICIDE RESIDUES; WATER POLLUTION; DDT	O'Shea, T.J. Fleming, W.J., III Comartie, E. 1980 Science 209:509-510

Total DDT (No postings in CHEMLINE).
50-29-3
C14-H9-Cl5
MW 354.50
Rabbit, cottontail
SYLVILAGUS FLORIDANUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
447 Muscle			4	Not given	0.27 ppm wet wt (21.7 ppm lipid wt) Geometric mean	Sum of isomers and metabolites Lipid wt value exceeds 5 ppm tolerance for human consumption of domestic animals Collected near former DDT manufacturing plant nearly 10 yr after cessation of production. Alabama, Wheeler National Wildlife Refuge Implied reproductive effects BIRDS; RABBITS; ALABAMA; BODY; MUSCLES; BIOACCUMULATION; INDUSTRIAL POLLUTION; LAND POLLUTION; PESTICIDE RESIDUES; WATER POLLUTION; DDT	O'Shea, T.J. Fleming, W.J., III Comartie, E. 1980 Science 209:509-510

Total DDT (No postings in CHEMLINE).
50-29-3
C14-H9-Cl5
MW 354.50
Rabbit, swamp
SYLVILAGUS AQUATICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
4A8 Muscle			5	Not given	0.25 ppm wet wt (18.0 ppm lipid wt) Geometric mean	Sum of isomers and metabolites lipid wt value exceeds 5 ppm tolerance for human consumption of domestic animals Collected near former DDT manufacturing plant nearly 10 yr after cessation of production. Alabama, Wheeler National Wildlife Refuge Implied reproductive effects BIRDS; RABBITS; ALABAMA; BODY; MUSCLES; BIOACCUMULATION; INDUSTRIAL POLLUTION; LAND POLLUTION; PESTICIDE RESIDUES; WATER POLLUTION; DDT	O'Shea, T.J. Fleming, W.J., III Cosartie, E. 1983 Science 209:509-510

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
449 Eggs		GC	28	0.0-0.30 ppm wet wt	0.02 + or - 0.07 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DED; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:396-399

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gull, herring
LARUS ARGENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
450 Eggs		GC	a) 30 b) 28	a) 0.00-0.21 ppm b) 0.00-0.19 ppm Wet wt	a) 0.01 + or - 0.05 ppm b) 0.03 + or - 0.05 ppm Wet wt	a) Ratcliffe index 1.53-1.98, shell thickness 0.34-0.47 mm, shell wt 5.07-7.49 g, lipid content 6.10-10.20% b) Ratcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.64 g, 6.2-9.7% Collected 5/77. Maine, Appledore Island Virginia, Fisherman Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
451 Blood, serum	Ingestion		1	Not given	0.3 ppm	Accidental contamination of food by insecticide spray (45% toxaphene and 2% lindane). Slobbering, vomiting, muscle tremors, staggering. Periodic convulsions. Death 2 hr after onset of symptoms. PIGS; KANSAS; AUTOPSIES; NERVOUS SYSTEM DISEASES; BLOOD SERUM; BRAIN; CHLORINATED HYDROCARBONS; INSECTICIDES; LINDANE; BIOACCUMULATION	Mount, M.E. Traffas, V. Hilleret, R.J. Oehme, F.W. 1980 Journal of the American Veterinary Medical Association 177(9):445-447
452 Brain	Ingestion		1	a) Not given b) Not given	a) 2.0 ppm b) 4.0 ppm	a) Cerebrum b) Cerebellum Accidental contamination of food by insecticide spray (45% toxaphene and 2% lindane). Slobbering, vomiting, muscle tremors, staggering. Periodic convulsions. Death 2 hr after onset of symptoms. PIGS; KANSAS; AUTOPSIES; NERVOUS SYSTEM DISEASES; BLOOD SERUM; BRAIN; CHLORINATED HYDROCARBONS; INSECTICIDES; LINDANE; BIOACCUMULATION	Mount, M.E. Traffas, V. Hilleret, R.J. Oehme, F.W. 1980 Journal of the American Veterinary Medical Association 177(9):445-447

Uranium
7440-61-1
U
Atm 238.029, MP 1132 C, BP 3818 C, VP 100 mm Hg at 3270 C
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
453 Blood	Ingestion	AAS	20	a) < 0.0005-0.005 ppm b) < 0.0005-0.005 ppm c) < 0.0005-0.044 ppm d) 0.0005-0.05 ppm	a) 0.0022 ppm b) 0.0013 ppm c) 0.008 ppm d) 0.0072 ppm	a) Pastures fertilized with treated raffinate, pre-test b) Pastures fertilized with treated raffinate, post-test c) Controls, pre-test d) Controls, post-test Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
454 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.017 ppm b) 0.002 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/ acre) or commerical fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
455 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.002 ppm b) 0.004 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/ acre) or commerical fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

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Uranium
7440-61-1
U
AtW 238.029, MP 1132 C, BP 3818 C, VP 100 mm Hg at 3270 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
456 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.003 ppm b) 0.001 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 wc on plots treated with raffinate (100 lb N/ acre) or commerical fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, N.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI)
Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)
330-54-1
C9-H10-Cl2-N2-O
PM 233.10, MP 158-159 C
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
457 Blood		Colorimetry	a) 1 b) 1 c) 1 d) 1	a) Not given b) Not given c) Not given d) Not given	a) 4.85 + or - 0.93% b) 2.98 + or - 0.64% c) 2.50 + or - 0.57% d) 2.16 + or - 0.59%	a) At 5 ppm b) At 10 ppm c) At 25 ppm d) At 50 ppm Daily diet levels for 33 days Holstein cows, ages 4-6 yr CATTLE; METABOLITES; CHLORINE ORGANIC COMPOUNDS; HERBICIDES; ALABAMA; BLOOD; FECES; MILK; URINE	Kalra, S.K. Chahal, K.S. 1979 Ecotoxicology and Environmental Safety 3:362-368
458 Urine	Ingestion	Colorimetry	4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 33.48 + or - 2.76% b) 20.24 + or - 3.53% c) 34.71 + or - 6.82% d) 7.50 + or - 0.63% e) 21.35 + or - 2.88% f) 43.95 + or - 2.42% g) 6.05 + or - 1.39% h) 23.36 + or - 2.11%	a) At 5 ppm b) At 10 ppm c) At 25 ppm d) At 25 ppm (excreted as 3-(3,4-dichlorophenyl)-1-methylurea) e) At 25 ppm (excreted as 3-(3,4-dichlorophenyl) urea) f) At 50 ppm g) At 50 ppm (excreted as 3-(3,4-dichlorophenyl)-1-methylurea) h) At 50 ppm (excreted as 3-(3,4-dichlorophenyl) urea) Daily diet levels for 33 days Holstein cows, ages 4-6 yr. CATTLE; METABOLITES; HERBICIDES; ALABAMA; BLOOD; FECES; MILK; URINE	Kalra, S.K. Chahal, K.S. 1979 Ecotoxicology and Environmental Safety 3:362-368

Zinc
7440-66-6
Zn
Atw 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Antelope, pronghorn
ANTILOCAPRA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
459 Kidney		AAS	21	Not given	96.5 + or - ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
460 Liver		AAS	20	Not given	84.8 + or - 28.4 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Zinc
7440-66-6
Zn
Atw 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Bluegill
LEPOMIS MACROCHIRUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
461 Body, whole		AAS	61	Not given	108 ug/g	Fishes, mean length 95 mm, mean dry wt 16.40 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treament plants and recreational boating. Concentration inversely related to fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Fullhead, black
ICTALURUS MELAS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
#62 Body, whole		AAS	10	Not given	94.8 ug/g	Fishes, mean length 172 mm, mean dry wt 41.59 g, collected downstream of flood control weir at Algonquin. No major industrial effluent, metal input mainly from sewage treatment plants and recreational boating. Concentration inversely related to fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Cattle
BOS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
#63 Blood, serum	Ingestion	AAS	20	a) 1.25-3.05 ppm b) 1.9-2.97 ppm c) 1.55-2.85 ppm d) 1.7-3.3 ppm	a) 1.97 ppm b) 2.30 ppm c) 1.97 ppm d) 2.4 ppm	Pastures fertilized with treated raffinate, pre-test b) Pastures fertilized with treated raffinate, post-test c) Controls, pre-test d) Controls, post-test Grazing 6 acre plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No patholcgical changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
#64 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 86 + or - 3.5 ppm b) 71 + or - 6.5 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

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Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Cattle
ECS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
465 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 32 + or - 3.3 ppm b) 41 + or - 6.6 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
466 Kidney		AAS	190	12.9-31.6 ppm wet wt	18.6 + or - 2.8 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
467 Kidney	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 93 + or - 6 ppm b) 96 + or - 5 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
468 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 19.90 ppm b) 18.27 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
469 Liver		AAS	190	13.[illegible]-99.2 ppm wet wt	37.5 + or - 13.4 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

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Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Cattle
BCS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
470 Liver	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 143 + or - 0.9 ppm b) 132 + or - 12 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
471 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 33.92 ppm b) 42.65 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
472 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 95 + or - 2.7 ppm b) 96 + or - 2.0 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
473 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 340 + or - 10 ppm b) 267 + or - 28 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

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Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Cattle
BOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
474 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 36.10 ppm b) 45.72 ppm Wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE; RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; PICOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
475 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 117 + or - 3.3 ppm b) 110 + or - 0 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Crappie, Black
POMOXIS NIGROMACULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
476 Body, whole		AAS	26	Not given	113 ug/g	Fishes, mean length 109 mm, mean dry wt 18.09 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt. Illinois, Fox River ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Deer, mule
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
477 Kidney		AAS	24	Not given	97.4 + or - 16.2 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
478 Liver		AAS	30	Not given	113.3 + or - 24.6 ug/g dry wt	Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution. Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Grouse, ruffed
BONASA UMBELLUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
479 Feathers		AAS	130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 97 + or - 9 ug/g b) 90 + or - 5 ug/g c) 98 + or - 8 ug/g d) 84 + or - 5 ug/g e) 82 + or - 3 ug/g f) 112 + or - 14 ug/g Dry wt	a) 77 adults b) 53 juveniles c) 88 males d) 42 females e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest Wing and tail feathers Birds shot by hunters in remote forest areas. Significantly higher levels (P<0.01) during 1978-79 season. Virginia (SW) BIRDS; FEATHERS; JUVENILES; CADMIUM; COPPER; LEAD; NICKEL; SILVER; ZINC; VIRGINIA; ADULTS	Scanlon, P.F. Oderwald, R.G. Dietrick, T.J. Coggin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25:947-949

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Perch, yellow
PERCA FLAVESCENS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
480 Body, whole		AAS	40	Not given	106 ug/g	Fishes, mean length 104 mm, mean dry wt 11.22 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt. Illinois, Fox River ILLINOIS; POLY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	Vimikour, M.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
OVIS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
481 Bone	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 662 + or - 39 ppm b) 625 + or - 58 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Lisk, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
482 Brain	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 58 + or - 2 ppm b) 53 + or - 3 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Lisk, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61

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Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
CVIS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
483 Heart	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 59 + or - 2 ppm b) 54 + or - 7 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; ECHES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.M. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Link, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
484 Kidney	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 4135 + or - 253 ppm b) 3271 + or - 402 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; ECHES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.M. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Link, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
485 Liver	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 1627 + or - 161 ppm b) 1523 + or - 261 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; ECHES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Haschek, W.M. Telford, J.M. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Link, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61

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Zinc
7440-66-6
Zn
Atw 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
OVIS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
486 Muscle	Ingestion	ASV	14	a) Not given b) Not given c) Not given d) Not given	a) 151 + or - 7 ppm b) 117 + or - 5 ppm c) 108 + or - 3 ppm d) 95 + or - 20 ppm Dry wt	a) Animals fed sludge-grown crop, 9 samples (chuck) b) Animals fed sludge-grown crop, 9 samples (round) c) Animals fed control crop, 5 samples (chuck) d) Animals fed control crop, 5 samples (round) Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sewage sludge for 274 days Significantly higher levels (P < 0.05) in sludge-fed animals New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Hanchek, W.M. Telford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Link, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
487 Spleen	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 98 + or - 3 ppm b) 102 + or - 10 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric tons/hectare of municipal sludge for 274 days New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoewsand, G.S. Hanchek, W.M. Telford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wszolek, P.C. Link, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Swan, mute
CYGNUS OLOR

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
488 Kidney	Ingestion	AAS	a) 18 b) 11	a) 145-475 ug/g b) 80-235 ug/g Dry wt	a) 300 ug/g b) 145 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kindgom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
489 Liver	Ingestion	AAS	a) 18 b) 11	a) 240-1600 ug/g b) 120-435 ug/g Dry wt	a) 725 ug/g b) 257 ug/g Dry wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kindgom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. BIRDS; SWANS; UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-Cl12
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Crayfish
PROCAMBARUS CLARKI

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
490 Brain		Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.05 + or - 0.03 ppm b) 0.4 + or - 0.8 ppm c) 0.06 + or - 0.03 ppm d) 5.9 + or - 2.9 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirex Adults Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs up position, death. NERVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES	Minchew, C.D. Hunsinger, R.W. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526
491 Digestive gland		Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 1.7 + or - 0.6 ppm b) 4.6 + or - 1.7 ppm c) 1.4 + or - 0.9 ppm d) 7.8 + or - 2.0 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirex Adults Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs up position, death. NERVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; MISSISSIPP.; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES	Minchew, C.D. Hunsinger, R.W. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526
492 Gills		Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.7 + or - 0.2 ppm b) 0.8 + or - 0.1 ppm c) 1.1 + or - 0.1 ppm d) 1.7 + or - 0.3 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirex Adults Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs up position, death. NERVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES	Minchew, C.D. Hunsinger, R.W. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526

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1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Crayfish
PROCAMBARUS CLARKI

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
493 Green gland		Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.18 + or - 0.04 ppm b) 1.8 + or - 0.4 ppm c) 0.2 + or - 0.6 ppm d) 5.6 + or - 1.4 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirex Adults Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs up position, death. BRAVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES	Minchew, C.D. Hunsinger, R.W. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526
494 Intestine		Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 7.8 + or - 3.2 ppm b) 1.9 + or - 0.7 ppm c) 11.2 + or - 5 ppm d) 3.2 + or - 0.8 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirex Adults Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs up position, death. BRAVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES	Minchew, C.D. Hunsinger, R.W. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526
495 Muscle		Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.04 + or - 0.01 ppm b) 0.6 + or - 0.1 ppm c) 0.05 + or - 0.02 ppm d) 0.6 + or - 0.2 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirex Adults Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs up position, death. BRAVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES	Minchew, C.D. Hunsinger, R.W. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526

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1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Crayfish
ERIOCAMPARUS CLARKI

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
496 Nerve		Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.04 + or - 0.02 ppm b) 0.4 + or - 1.0 ppm c) 0.04 + or - 0.01 ppm d) 6.2 + or - 3.2 ppm	a) 7.4 ppt dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirex Adults Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs up position, death. NERVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES	Minchew, C.D. Hunsinger, R.W. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
497 Eggs		GC-EC	a) 3 b) 3 c) 2 d) 3	a) Not given b) Not given c) Not given d) Not given	a) 0.02 ppm b) 0.01 ppm c) 0.02 ppm d) 0.01 ppm Wet wt	4 clutches Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
498 Eggs		GC	28	0.0-0.26 ppm wet wt	0.02 + or - 0.06 ppm wet wt	Hatchliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DEE; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Monkey

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
499 Adipose		GLC		92-99%	95.3 + or - 3.2%	% recovery for concentration range 0.05-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.017 ppm. NEW YORK; ADIPOSE TISSUE; BLOOD PLASMA; LIVER; MEASUREMENT METHODS; PESTICIDES; CHLORINE ORGANIC COMPOUNDS	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:300-305
500 Blood, plasma		GLC		93-101%	95.7 + or - 3.5%	% recovery for concentration range 0.01-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.01 ppm. NEW YORK; ADIPOSE TISSUE; BLOOD PLASMA; LIVER; MEASUREMENT METHODS; PESTICIDES; CHLORINE ORGANIC COMPOUNDS	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:300-305
501 Liver		GLC		93-104%	96.5 + or - 5.0%	% recovery for concentration range 0.10-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.03 ppm. NEW YORK; ADIPOSE TISSUE; BLOOD PLASMA; LIVER; MEASUREMENT METHODS; PESTICIDES; CHLORINE ORGANIC COMPOUNDS	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:300-305

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Mouse
MCS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
502 Adipose		GLC		98-102%	98.6 + or - 4.9%	% recovery for concentration range 0.005-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.017 ppm. NEW YORK; ADIPOSE TISSUE; BLOOD PLASMA; LIVER; MEASUREMENT METHODS; PESTICIDES; CHLORINE ORGANIC COMPOUNDS	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:300-305
503 Blood, plasma		GLC		93-107%	97.8 + or - 6%	% recovery for concentration range 0.005-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.01 ppm. NEW YORK; ADIPOSE TISSUE; BLOOD PLASMA; LIVER; MEASUREMENT METHODS; PESTICIDES; CHLORINE ORGANIC COMPOUNDS	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:300-305
504 Liver		GLC		94-102%	98.1 + or 6.5%	% recovery for concentration range 0.01-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.03 ppm. NEW YORK; ADIPOSE TISSUE; BLOOD PLASMA; LIVER; MEASUREMENT METHODS; PESTICIDES; CHLORINE ORGANIC COMPOUNDS	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:300-305

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Turtle, box
TERRAPENE CAROLINA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
505 Eggs		GC-EC	a) 6 b) 3 c) 1 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 1.4 ppm b) 1.6 ppm c) 2.5 ppm d) 1.4 ppm Dry wt	a) 1970 b) 1977 c) 1974 d) 1975 Collected from area sprayed with 5% mirex bait to control fire ants. Applications 10/68, 5/69, 10/69 and 5/74. Mississippi, Lowndes County EGGS; REPTILES; TURTLES; MISSISSIPPI; ADULTS; LIVER; BIOACCUMULATION; PESTICIDE RESIDUAS; CHLORINE ORGANIC COMPOUNDS	Holcomb, C.H. Parker, W.S. 1979 Bulletin of Environmental Contamination and Toxicology 23:369-371

(NEXT PAGE)

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Turtle, box
TERRAPENE CAROLINA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
506 Liver		GC-EC	a) 6 b) 3 c) 1 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 2.7 ppm b) 4.1 ppm c) 3.0 ppm d) 0.68 ppm Dry wt	a) 1970 b) 1972 c) 1974 d) 1975 Adults collected from area sprayed with mirex bait to control fire ants. Applications 10/68, 5/69, 10/69 and 5/74. Mississippi, Lowndes County EGGS; REPTILES; TURTLES; MISSISSIPPI; ADULTS; LIVER; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS	Holcomb, C.M. Parker, W.S. 1979 Bulletin of Environmental Contamination and Toxicology 23:369-371

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C112
MW 545.6, MP 485 C, VP 6X10(E-6) mm Hg at 50 C
Turtle, slider
CHRYSEMYS SCRIPTA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
507 Eggs		GC-EC	a) 2 b) 3 c) 4 d) 9 e) 6	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 1.8 ppm b) 2.2 ppm c) 0.15 ppm d) 0.16 ppm e) 0.04 ppm Dry wt	a) 1970 b) 1972 c) 1974 d) 1975 e) 1977 Adults collected from area sprayed with 5% mirex bait to control fire ants. Applications 10/68, 5/69, 10/69 and 9/74. Mississippi, Lowndes County EGGS; REPTILES; TURTLES; MISSISSIPPI; ADULTS; LIVER; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS	Holcomb, C.M. Parker, W.S. 1979 Bulletin of Environmental Contamination and Toxicology 23:369-371
508 Liver		GC-EC	a) 2 b) 3 c) 4 d) 9 e) 6	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.98 ppm b) 2.1 ppm c) 0.39 ppm d) 0.12 ppm e) 0.04 ppm Dry wt	a) 1970 b) 1972 c) 1974 d) 1975 e) 1977 Adults collected from area sprayed with 5% mirex bait to control fire ants. Applications 10/68, 5/69, 10/69 and 5/74. Mississipri, Lowndes County EGGS; REPTILES; TURTLES; MISSISSIPPI; ADULTS; LIVER; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS	Holcomb, C.M. Parker, W.S. 1979 Bulletin of Environmental Contamination and Toxicology 23:369-371

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
143-50-0
C10-C110-O
MW 490.68, VP <3X10(E-7) mm Hg at 25 C
Bluefish
POMATOMUS SALTATRIX

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
509 Muscle		GC	1	a) Not applicable b) Not applicable c) Not applicable	a) 0.590 ppm b) 0.045 ppm c) < 1 ppb	a) Kepone b) Monohydro-Kepone c) Dihydro-Kepone Collected 1976/77 Virginia, James River Chesapeake Bay CHLORINATION; MUSCLES; MEASUREMENT METHODS; VIRGINIA; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5):1035-1037

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
143-50-0
C10-C110-O
MW 490.68, VP <3X10(E-7) mm Hg at 25 C
Crab
CALLINECTES SAPIDUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
510 Muscle		GC	2	a) 0.634-1.36 ppm b) 0.048-0.094 ppm c) Not applicable	a) 0.997 ppm b) 0.070 ppm c) < 1 ppb	a) Kepone b) Monohydro-Kepone c) Dihydro-Kepone Collected 1976/77 Virginia, James River Chesapeake Bay CHLORINATION; MUSCLES; MEASUREMENT METHODS; VIRGINIA; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5):1035-1037

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
143-50-0
C10-C110-O
MW 490.68, VP <3X10(E-7) mm Hg at 25 C
Croaker
MICROPOGON UNDULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
511 Muscle		GC	6	a) 0.066-0.726 ppm b) 0.008-0.057 ppm c) Not applicable	a) 0.431 ppm b) 0.029 ppm c) < 1 ppb	a) Kepone b) Monohydro-Kepone c) Dihydro-Kepone Collected 1976/77 Virginia, James River Chesapeake Bay CHLORINATION; MUSCLES; MEASUREMENT METHODS; VIRGINIA; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5):1035-1037

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
143-50-0
C10-Cl10-O
MW 493.68, VP <3X10(E-7) mm Hg at 25 C
Mullet
MUGIL sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
512 Muscle		GC	2	a) 0.100-0.534 ppm b) 0.010-0.035 ppm c) Not applicable	a) 0.317 ppm b) 0.023 ppm c) < 1 ppb	a) Kepone b) Monohydro-Kepone c) Dihydro-Kepone Collected 1976/77 CHLORINATION; MUSCLES; MEASUREMENT METHODS; VIRGINIA; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5):1035-1037

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
143-50-0
C10-Cl10-O
MW 490.68, VP <3X10(E-7) mm Hg at 25 C
Spot
LEIOSTOMUS XANTHURUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
513 Muscle		GC	3	a) 0.235-0.670 ppm b) 0.020-0.040 ppm c) Not applicable	a) 0.505 ppm b) 0.031 ppm c) < 1 ppb	a) Kepone b) Monohydro-Kepone c) Dihydro-Kepone Collected 1976/77 Virginia, James River Chesapeake Bay CHLORINATION; MUSCLES; MEASUREMENT METHODS; VIRGINIA; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5):1035-1037

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
143-50-0
C10-Cl10-O
MW 490.68, VP <3X10(E-7) mm Hg at 25 C
Trout
ONCORHYNCHUS MYKISS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
514 Muscle		GC	1	a) Not applicable b) Not applicable c) Not applicable	a) 0.178 ppm b) 0.019 ppm c) < 1 ppb	a) Kepone b) Monohydro-Kepone c) Dihydro-Kepone Collected 1976/77 Virginia, James River Chesapeake Bay CHLORINATION; MUSCLES; MEASUREMENT METHODS; VIRGINIA; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5):1035-1037

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-C16-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
515 Eggs		GC-EC	a) 3 b) 3 c) 3 d) 5 e) 1 f) 2 g) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 0.02 ppm b) 0.01 ppm c) 0.01 ppm d) 0.02 ppm e) 0.02 ppm f) 0.03 ppm g) 0.02 ppm Wet wt	7 clutches Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDT; DDD; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-C16-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Gull, great black-backed

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
516 Eggs		GC	28	0.0-0.55 ppm wet wt	0.12 + or - 0.16 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-C16-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
517 Adipose	Placental	GC/MS	1	Not applicable	..5 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (20 cm length) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

(NEXT PAGE)

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Porpoise, harbor
PHOCOENA PHOCOENA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
518 Kidney	Placental	GC/MS	1	Not applicable	2.0 ug/g wet wt	Fr extractable lipids. Kidney lipid content 1.5% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:726-732
519 Liver	Placental	GC/MS	1	Not applicable	4.7 ug/g wet wt	Fr extractable lipids. Liver lipid content 2% Value for fetus (20 cm length) of beached harbor porpoise in poor condition Netherlands, Texel PORPOISE; ADIPOSE TISSUE; KIDNEYS; LIVER; NETHERLANDS; FETUS; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOROCYCLOHEXANE; LINDANE	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:726-732

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
60-57-1
C12-H8-Cl6-O
MW 380.93, MP 176-177 C, VP 7.78X10(E-7) mm Hg at 20 C
Snake, garter
THAMNOPHIS SIRTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
520 Body, whole		GC	6	0.10-0.19 ppm wet wt	0.09 ppm wet wt	Snout-vent length 646-752 mm, lipid content 3.2-9.0% Lake Michigan, Spider Island SNAKES; MARYLAND; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; MERCURY; POLYCHLORINATED BIPHENYLS	Heinz, G.H. Hanseltine, S.D. Hall, R.J. Kryaitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:738-743

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
39765-80-5
C10-H5-Cl9
MW 444.23
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
521 Eggs		GC-EC	a) 3 b) 3 c) 5 d) 2 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.02 ppm b) 0.01 ppm c) 0.04 ppm d) 0.02 ppm e) 0.02 ppm Wet wt	5 clutches Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
39765-80-5
C10-H5-Cl9
MW 444.23
Gull, herring
LARUS ARGENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
522 Eggs		GC	a) 30 b) 28	a) 0.00-0.52 ppm b) 0.00-0.44 ppm Wet wt	a) 0.05 + or - 0.10 ppm b) 0.04 + or - 0.09 ppm Wet wt	a) Ratcliffe index 1.53-1.98, shell thickness 0.34-0.47 mm, shell wt 5.07-7.49 g, lipid content 6.10-10.20% b) Ratcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.44 g, lipid content 6.2-9.7% Collected 5/77. Maine, Appledore Island Virginia, Fishermans Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Wolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
39765-80-5
C10-H5-Cl9
MW 444.23
Snake, garter
THAMNOPHIS SIRTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
523 Body, whole		GC	6	0.10-0.33 ppm wet wt	0.18 ppm wet wt	Snout-vent length 646-752 mm, lipid content 3.2-9.0% Lake Michigan, Spider Island SNAKES; MARYLAND; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; MERCURY; POLYCHLORINATED BIPHENYLS	Heinz, G.H. Haseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:730-743

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-
39765-80-5
C10-H5-Cl9
MW 444.23
Snake, water
NERODIA SIPEDON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
524 Body, whole		GC	1	Not applicable	0.25 ppm wet wt	Snout-vent length 855 mm, 6.2% lipid content Lake Michigan, Pilot Island SNAKES; MARYLAND; BODY; BIOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DIELDRIN; MERCURY; POLYCHLORINATED BIPHENYLS	Heinz, G.H. Hasseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:738-743

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
26880-48-8
C10-H4-Cl8-O
MW 423.77
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
525 Eggs		GC-EC	a) 3 b) 3 c) 5 d) 1 e) 2 f) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.01 ppm b) 0.01 ppm c) 0.04 ppm d) 0.07 ppm e) 3.03 ppm f) 0.01 ppm Wet wt	7 clutches Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
26880-48-8
C10-H4-Cl8-O
MW 423.77
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
526 Eggs		GC	28	0.0-0.43 ppm wet wt	0.22 + or - 0.10 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
26880-48-8
C10-H4-C18-O
MW 423.77
Gull, herring
LARUS ARGENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
527 Eggs		GC	28	0.00-0.18 ppm wet wt	0.02 + or - 0.05 ppm wet wt	Batcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.64 g, lipid content 6.2-9.7%. Collected 5/77. Virginia, Fisherman Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; CCC; DDE; DDT; DIELDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI)
2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
1024-57-3
C10-H5-C17-O
MW 389.32
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
528 Eggs		GC-EC	a) 3 b) 3 c) 5 d) 2 e) 3 f) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.01 ppm b) 0.01 ppm c) 0.04 ppm d) 0.02 ppm e) 0.01 ppm f) 0.01 ppm Wet wt	7 clutches Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDI; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
5103-73-1
C10-H5-C19
MW 440.2
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
529 Eggs		GC-EC	a) 3 b) 3 c) 5 d) 2 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.02 ppm b) 0.01 ppm c) 0.03 ppm d) 0.02 ppm e) 0.03 ppm Wet wt	5 clutches Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDI; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Crocodile, American
CROCODYLUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
530 Eggs		GC-EC	a) 3 b) 5 c) 2	a) Not given b) Not given c) Not given	a) 0.01 ppm b) 0.01 ppm c) 0.01 ppm Wet wt	3 clutches Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park EGGS; CROCODILES; REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, T.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)
5103-71-9
C10-H6-Cl8
MW 409.76
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
531 Eggs		GC	28	0.0-0.50 ppm wet wt	0.04 + or - 0.11 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)
76-44-8
C10-H5-Cl7
MW 373.35, MP 95-96 C, VP 3E10(E-4) mm Hg at 25 C
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
532 Eggs		GC	28	0.0-0.41 ppm wet wt	0.05 + or - 0.11 ppm wet wt	Ratcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77. Maine, Appledore Island BIRDS; MAINE; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDE; DDT; DIELDRIN; OXYCHLORDANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

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M. Virginia Cone, Rosmarie A. Faust, Margaret F. Baldauf

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16. Abstract (Limit: 200 words)

A comprehensive data base of chemicals identified in feral and food animals has been established under the direction of the Exposure Evaluation Division in the Environmental Protection Agency's Office of Toxic Substances. This effort has grown out of the concern over continuing reports of toxic chemicals in human tissues and body fluids. Feral populations and food animals are regarded as indicators of environmental contamination and subsequent human body burden.

This data base is a companion to *Chemicals Identified in Human Biological Media* and follows basically the same format. The data base on human body burdens is in its third year of publication. This is the first annual report for the feral and food animal file.

Data were obtained primarily from the open literature through manual searches retrospective to 1979. The file contains information on 60 different substances.

17. Document Analysis a. Descriptors

Body burden
Animal tissue/body fluids
Residues

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

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